

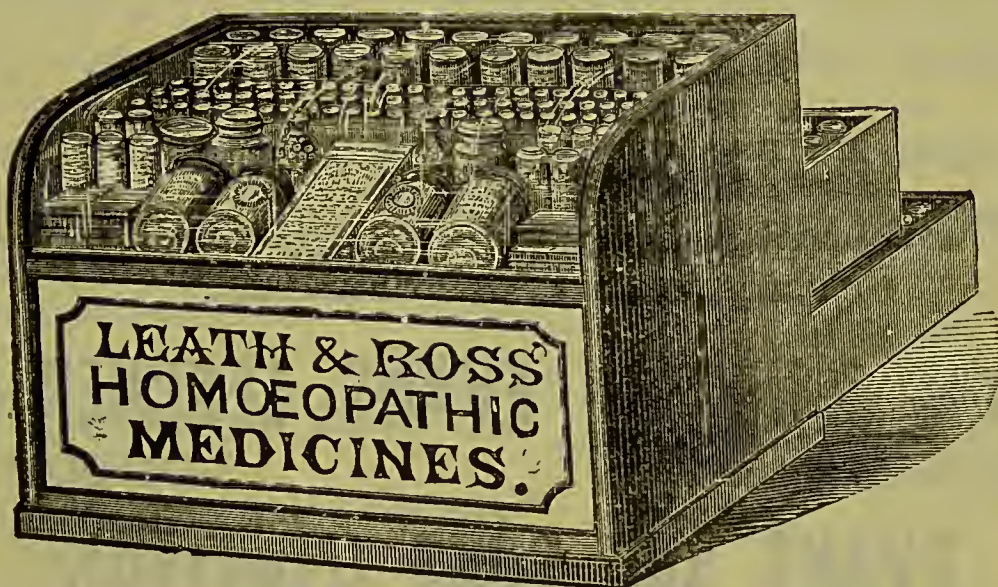
# LEATH & ROSS'S HOMŒOPATHIC PHARMACIES

9 VERE STREET, W.,  
And 5 ST. PAUL'S CHURCHYARD, E.C., LONDON.

OUR £10 10s. AGENTS' SHOW CASE.

Contents realise £17 17s. 8d.

DIMENSIONS.—Length, 18 in.;  
Breadth, 13 in.; Height, 13 in.



DESCRIPTION.—A Handsome Bent Glass Case, with three drawers, the contents of top drawer visible, the Pilules and Tinctures arranged in the other two in alphabetical order.

## WHOLESALE PRICE LIST OF MEDICINES PUT UP READY FOR SALE.

### GLOBULES or PILULES—

Sixpenny Tubes	..	..	2/9 per dozen.
Ninepenny "	..	..	4/8 "
Shilling "	..	..	5/- "

### TINCTURES or TRITURATIONS—

Sixpenny Bottles	..	..	2/9 per dozen.
Ninepenny "	..	..	4/8 "
Shilling "	..	..	5/- "

### PROPRIETARY ARTICLES.

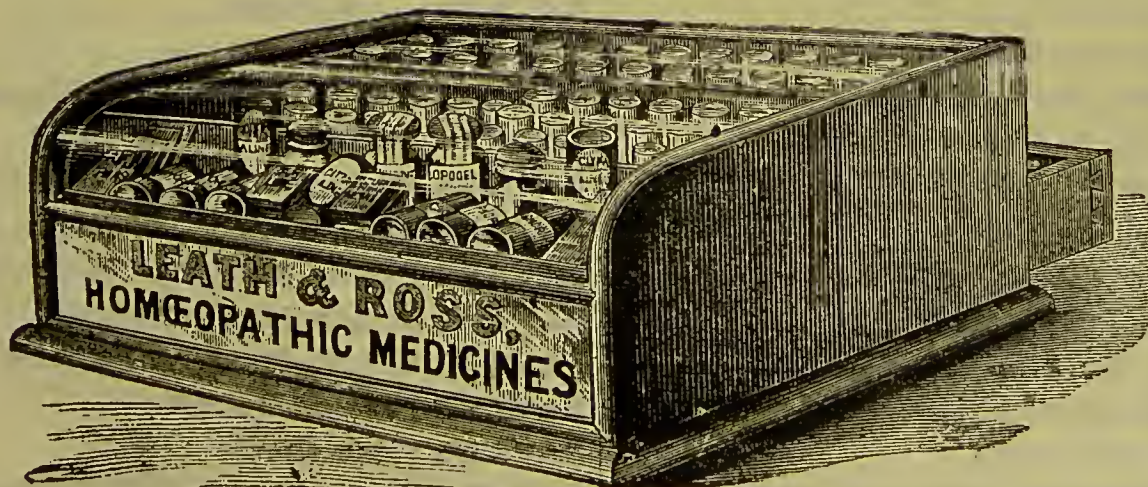
Neuraline	..	..	1/1½	Berberine	..	..	1/1½	Linimentum Auricularis	..	1/1½
Glykaline	..	..	1/1½	Chilblain Liniment	..	..	1/1½	Bryonia Liniment	..	1/1½
Phospho-muriate of Quinine	1/1½			Odontagie Essence	..	..	1/1½	Corn Eradicator	..	1/1½

All the above Proprietary Articles, 9/6 per dozen.

OUR £6 6s. AGENTS' SHOW CASE.

Contents realise £10 18s. 3d.

DIMENSIONS.—Length, 20 in.;  
Breadth, 15½ in.; Height, 9½ in.



DESCRIPTION.—A Handsome Bent Glass Case, with two drawers, the contents of top drawer visible, the Pilules and Tinctures arranged in alphabetical order.





# DRUGGISTS' SUNDRIES



We beg again to call the attention of the Trade to the above department of our business, which has so rapidly increased as to necessitate constant enlargement of our premises. We guarantee quality of all our goods, and all articles of Best Quality bear our Trade Mark as above. The word "Savars" is also registered as a Trade Mark.

Our Price Lists are most complete, and are supplied (as also are our goods) **TO REGISTERED CHEMISTS AND DRUGGISTS ONLY.**

**EVANS, SONS & CO.**  
LIVERPOOL.

**EVANS, LESCHER & WEBB,**  
LONDON.

**EVANS AND SONS (LIMITED),**  
MONTREAL (CANADA).

Offices at BIRMINGHAM, MANCHESTER, PARIS, TORONTO,  
VICTORIA (B.C.), SYDNEY, &c., &c.

SAVARS Absorbent Cotton Wool  
SAVARS Animal Soap  
SAVARS Bears' Grease  
SAVARS Bed Pan, with Cover (Registered)  
SAVARS Breast Exhausters  
SAVARS Breast Pumps  
SAVARS Breast Relievers  
SAVARS Brilliantine  
SAVARS Brunswick Black  
SAVARS Bunion Plasters, Savars  
SAVARS Cachou Lozenges  
SAVARS Calves' Foot Jelly  
SAVARS Camphor Caskets  
SAVARS Carbolic Acid Soap  
SAVARS Chest Protectors  
SAVARS Cold Tar Soap  
SAVARS Cold Cream  
SAVARS Cologne Cream  
SAVARS Combination Medicine Spoon (China)

SAVARS Corn Plasters, Savars  
SAVARS Cosmetiques  
SAVARS Cotton Wool  
SAVARS Court Plasters  
SAVARS Cream of Lilies  
SAVARS Cubeb Cigarettes  
SAVARS Ear Syringes  
SAVARS „ Sponges  
SAVARS Eau de Cologne  
SAVARS Electro Magnetic Machines  
SAVARS Emollient Camphor Roll  
SAVARS Extract of Limes and Glycerine  
SAVARS Family Enema, and other Enemas  
SAVARS Family Adhesive Plaster, Savars  
SAVARS Family Mustard Plaster  
SAVARS Family Magnum Pomades  
SAVARS Feeding Bottles  
SAVARS Flesh Gloves  
SAVARS Floral Bloom, in 1/- Bottles





# DRUGGISTS' SUNDRIES



SAVARS Filtering Papers (Circular)

SAVARS Fluid Dentifrice

SAVARS Fly Papers

SAVARS Fossiline, Simple

SAVARS „ Plaster, Adhesive, Savars  
Adheres without warming, and may be easily  
removed for the inspection of wounds, &c.

SAVARS Fossiline Pomade

SAVARS Fuller's Earth, in Packets

SAVARS Furniture Polish

SAVARS Glycerine Jelly

SAVARS "Good Samaritan" Chest Protectors  
—Vest shape—these are manufactured from  
selected Lamb's Wool, specially purified  
without chemical aid; they are free from any  
obnoxious colouring matter, cochineal only  
being used, and they have an even surface,  
they are the cheapest Vest-shape Protectors  
sold.

SAVARS "Good Samaritan" Porous Plasters.  
—Capsicum, Belladonna, Roborans, and  
Strengthening, spread on a new material  
equal to leather; the cheapest Porous  
Plaster made; quite as effectual as any and  
more comfortable in the wearing.

SAVARS Gutta Percha Tissue

SAVARS House Thermometer

SAVARS Improved Higginson Enema

SAVARS Inexhaustible Smelling Salts

SAVARS Jewellery Requisites

SAVARS Juniper Tar Soap

SAVARS Knife Polish

SAVARS Lavender Water

SAVARS Lint

SAVARS Lip Salve

SAVARS Marking Ink (Guaranteed)

SAVARS "May Blossom" Requisites

SAVARS Medicine Droppers

SAVARS Metal Polishing Paste

SAVARS Nail Trimmers

SAVARS Nipple Shields

SAVARS Oatmeal Soap

SAVARS Odorators (Folding)

SAVARS Obstetric Binders

SAVARS Ozone Water

SAVARS Parcel Post Envelopes

SAVARS Perfume Sachets

SAVARS Perfumery

SAVARS Poison Stoppers

SAVARS Pomades—Cantharadine, Castor Oil, Crystal-  
lized, Floral, Fossiline, Marrow, "May" Blossom

SAVARS Popular Inhaler

SAVARS Poudre de Riz

SAVARS Restorative Smelling [Salts

SAVARS Salicylic Corn Plasters (Savars)

SAVARS Sealing Wax

SAVARS Soda Water Taps

SAVARS Shaving Cream

SAVARS Starch Glaze

SAVARS Sulphur Water

SAVARS Toilet Companion—comprising a variety  
of Savars Specialities arranged in a neat  
partitioned box, handsomely labelled, pecu-  
liarly adapted for a Birthday Gift.

SAVARS Toilet Requisites

SAVARS Toilet Soaps

SAVARS Tooth Paste

SAVARS Tooth Picks

SAVARS Transparent Glycerine Soap

SAVARS Transparent Wash Balls

SAVARS Trusses

SAVARS Vaccination Shields

SAVARS Violet Powder (guaranteed pure Starch  
Powder)

SAVARS White Fossiline Cold Cream

SAVARS White Fossiline Pomade

SAVARESE'S Membraneous Capsules.

SAVARS Poor Man's Plasters, ordinary, Savars

SAVARS Poor Man's Plasters, Porous, Savars.

We call special attention to these Plasters.  
They are the same size as ordinary Poor Man's  
Plasters, but spread on a Patented Material  
equal to Leather, and Porous. They already  
command a large and ready sale.

SAVARS Porous Marginal Plasters, Savars,  
spread on Leather

SAVARS Pumice Stone

SAVARS Respirators

N.B.—For Prices, &c., see our Business Price List, which can be had on application  
accompanied with card.

**SPECIAL LISTS AND TERMS FOR EXPORT.**



# HEAD-QUARTERS FOR SPONGES.

# CRESSWELL BROTHERS,

1 & 2 RED LION SQUARE, LONDON, W.C.

(To avoid mistakes please carefully note style of firm and address.)

**THE LARGEST IMPORTERS, HOLDING THE LARGEST STOCK,**  
**QUOTING THE LOWEST PRICES.**

The importance of CRESSWELL BROTHERS' trade in the Levant is testified to by the energetic action of the British Foreign Office on their behalf, for the first time in the history of the trade. A copy of the last of a series of important letters from the Foreign Office is appended :—

**Messrs. Cresswell Brothers,  
1 and 2 Red Lion Square, W.C.**

**Foreign Office,  
December 29th, 1888.**

With reference to the letter from this office of the 31st October, I am directed by the Marquis of Salisbury to inform you that Her Majesty's Ambassador at Constantinople reports that the Caimakam of Calymnos has received orders from the Porte to recognise your agent as the agent and representative of British trade interests.

*It should be noted that Cresswell Brothers' establishment at Calymnos is quite distinct from their principal one at the fishing centre of Aegina (Greece).*

**HONEY COMB, 1st, 2nd, and 3rd Qualities.**  
On Strings or in Cardboard Boxes of 1 dozen pieces and  
upwards.

At per dozen.

3/	4/	6/	9/	12/	15/	18/	24/	30/	36/	42/	48/	54/	60/	66/	72/
----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

FINE TURKEY CUPS OR SOLIDS.

Egyptian and Brown Turkey.

At per dozen.  
2/ 3/ 4/ 6/ 9/ 12/ 18/ 24/ 30/ 36/ 42/ 48/ 54/ 60/  
and upwards.

CUBAN.

On Strings of 12 pieces.

At per string.

Honey Comb, No. 1	...	...	1/	2/	3/	4/	6/	9/	12/
" " No. 2	...	...	1/	2/	3/	4/	6/	9/	12/
Cuban Yellow	...	...	1/	2/	3/	4/	6/	9/	12/

## SPONGES ON CARDS.

Honey Comb or Turkey.

1d. size 6/, 12 on card ; 2d. size 12/, 12 on card ; 3d. size 18/,  
12 on card ; 4d. size 24/, 12 on card, at per dozen cards.  
6d. size 1/6, 6 on card ; 1s. size 3/, 6 on card, and upwards, all  
at half retail prices.

## SPECIAL BIN CASES.

B. C.		SPECIES AND VARIETIES								PER CASE.	
1.	Cuban, Fine	...	...	...	...	...	...	...	150 at 2d., 125 at 4d., 50 at 8d.	...	£5
"	2. " Honeycomb, No. 1.	...	...	...	...	...	...	...	100 at 3d., 100 at 6d., 25 at 1s.	...	5
"	3. " " No. 2.	...	...	...	...	...	...	...	150 at 2d., 150 at 4d., 50 at 6d.	...	5
"	6. Mediterranean Honeycomb	...	...	...	...	...	...	...	150 at 2d., 150 at 4d., 50 at 6d.	...	5
"	7. " "	...	...	...	...	...	...	...	100 at 3d., 105 at 6d., 30 at 9d.	...	5
"	8. " "	...	...	...	...	...	...	...	100 at 6d., 40 at 9d., 20 at 1s.	...	5
"	9. " "	...	...	...	...	...	...	...	40 at 1s., 20 at 1s. 6d., 15 at 2s.	...	5
"	10. " "	...	...	...	...	...	...	...	15 at 2s., 16 at 2s. 6d., 10 at 3s.	...	5

## SELECT CASES OF DRUGGISTS' SPONGES.

Fine Turkey Sponges—No. 2.	Finest Toilet Cups, 1st quality, assorted sizes,	65	pieces	...	...	...	...	190/
" " " No. 4.	Good " " 2nd " "	120	"	...	...	...	...	230/
" " " No. 10.	" " Solids, 1st " "	110	"	...	...	...	...	130/
Honey Comb Sponges—No. 16.	Finest Bath Shapes, 1st " "	125	"	...	...	...	...	230/
" " No. 17.	" " " " " "	75	"	...	...	...	...	130/
" " No. 20.	Superior Large Bath " "	25	"	...	...	...	...	130/
" " No. 22.	" Quality Shapes, 2nd " "	75	"	...	...	...	...	80/
" " No. 24.	Good " Large Bath, " "	25	"	...	...	...	...	95/
" " No. 26.	" " assorted sizes, 3rd " "	85	"	...	...	...	...	65/

In ordering state whether bleached or unbleached and quality required.

Buyers sending their orders for Sponges to CRESSWELL BROTHERS will receive the best value in the market, and will have the satisfaction of knowing that their goods will be selected from the largest and most varied stock of sponges in Europe.

**CRESSWELL BROTHERS,** <sup>1 and 2</sup> **RED LION SQUARE** (next to Church), **LONDON, W.C.**

*No connection whatever with a Company lately trading under a similar name in the same square, but now in liquidation.*



A copy of this Supplement is inserted in every number issued of "THE CHEMIST AND DRUGGIST."

# THE CHEMIST & DRUGGIST

## SUPPLEMENT.

Businesses Wanted.  
Businesses for Disposal.  
Premises to Let.  
Auction Sales.

SATURDAY, APRIL 27, 1889.

Partnerships.  
Situations Vacant.  
Situations Wanted.  
Miscellaneous.

This Supplement will be given free to any Chemist and Druggist or Assistant who will call for it at 42 Cannon Street on Friday afternoon, or will be posted on Fridays to any one who sends an addressed postal wrapper.

ADVERTISEMENTS for this Supplement can be received on FRIDAY MORNING, first post, though it is requested that these may be sent in as early in the week as possible.

EXCHANGE COLUMN ADVERTISEMENTS will appear on page 10 (bottom folio), and must be received not later than THURSDAY AT NOON, to appear in the issue of the Saturday following.

All Advertisements for this Supplement and Exchange Column must be prepaid. Remittances payable to EDWARD HALSE, and crossed MARTIN & Co.

OFFICES: 42 CANNON ST., LONDON, E.C.

### CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.

CHEMISTS' TRANSFER AGENTS,

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION:

The business conducted by Messrs. ORRIDGE & Co. has been known as a Transfer Agency since the year 1843, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

1.—LONDON (SOUTH).—Very old-established good class Business, Retail and Dispensing; returns nearly £800; *very profitable*; situate in main road, busy locality; well-fitted shop, first-rate stock; price £750: part may remain if wished.

2.—LONDON (WEST-END).—Retail and Dispensing Business of good class; well situated in main thoroughfare; returns average over £800 yearly; well-fitted shop and good stock; about £750 required; part can remain.

3.—LONDON, S.W.—Good-class Retail and Dispensing Business; well fitted shop and good stock; large house with private entrance; rent moderate, on lease; the returns amount to £600 yearly; about £600 required.

4.—LONDON SUBURB, N.W.—Improving locality; small increasing Business; returns last year £405, with nearly £200 yearly *net*; good house, &c., attached; about £250 required.

5.—BORDERS OF WALES.—Good-class Retail and Dispensing Business; returns nearly £600; large handsome double-fronted shop and good stock; full particulars on application.

6.—SOUTH COAST.—Attractive locality; *very profitable* Business; Retail, Prescribing, and Dispensing; returns nearly £600; large house, good garden, &c.; about £600 required.

7.—WEST OF ENGLAND.—Unopposed Country Business (Mixed); returns nearly £800 yearly, with *good profits*; well-fitted shop and excellent stock; convenient house; price about £500.

8.—SUFFOLK.—Unopposed Business of good class; Retail and Dispensing; returns nearly £550, rapidly increasing; large double-fronted shop and good stock; convenient house; attractive garden; about £500 required.

9.—MIDLANDS.—Family Retail and Dispensing Business; situate in commanding position; returns average £817, with *good profits*; large house, laboratory, &c.; attractive garden; about £750 required.

10.—GLOUCESTERSHIRE.—First-class Dispensing and Retail Business; returns nearly £950 yearly; *very profitable*; good situation in main street; handsomely fitted shop; business admits of large extension; one proprietary article more than pays rent; about £950 required; full particulars on application.

11.—SOMERSET.—Large town; an old-established Business; returns £900 yearly; well and substantially fitted; situate in the centre of the town; large house, with warehouse, garden, &c.; rent moderate; held on lease; price about £750.

12.—SUSSEX.—Favourite town; handsome shop, splendidly situated at a corner; returns £1,300 to £1,350 yearly; good profitable business; full working stock; price about £1,100; full particulars on application.

13.—SURREY.—Pretty locality; returns from good-class business about £400; *very profitable*; good house and shop; price about £300.

14.—WESTERN COUNTY.—Good town; Light Retail and Dispensing Business; returns nearly £450 yearly; value of stock and fixtures about £450.

Particulars of any of the above will be furnished on application.

N.B.—NO CHARGE TO PURCHASERS.

Other Businesses, Town and Country; particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.  
Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the especial attention of a London agent.

SPECIAL NOTICE.—TO PRINCIPALS AND ASSISTANTS.

MESSRS. ORRIDGE & Co.'s Register is open either to Principals or Assistants  
FREE OF CHARGE.

ORRIDGE & CO., 32 Ludgate Hill, LONDON, E.C.



**PARSON C. BAKER,**

8 Stockbridge Terrace, Victoria Station, S.W.,  
CHEMISTS' VALUER AND TRANSFER-AGENT,

	Establd.	Present Hands	Returns	Rent	Rooms in house	Price
Nice Town, Kent*	13 yrs.	5 yrs.	£380	£32	8	£250
Lancashire Coast*	5	5	300	37	7	250
Suburb, South Wales	1	1	400	32	7	300
Peckham, S.	20	—	450	50	7	325
Plymouth*	70	8	350	75	9	200
North London*	old	1	300	45	6	180
Country, Kent	60	15	600	60	8	550
Lincolnshire Coast*	15	15	300	28	6	200
Manchester*	50	2	250	30	7	150
London, S.	1	1	250	35	6	85
Liverpool	10	10	550	45	6	500
Camberwell, S.E.*	60	—	320	65	7	300
Pimlico	45	14	400	60	10	300
Bradford	20	20	900	40	12	valuation
Yorkshire Town	7	7	450	30	6	350

Those marked \* have been neglected and must increase in good hands.

**F. J. BRETT,**  
VALUER, LEICESTER,

60 St. Stephen's Road.

References to principal London and Provincial Wholesale Houses, also to numerous clients throughout the United Kingdom.

BUSINESSES THOROUGHLY INVESTIGATED FOR BUYERS: 20 YEARS' EXPERIENCE.

**£1,400 RETURNS.**—First-class Retail and Dispensing; fashionable seaside watering-place, South; vendor retiring; modern house on long lease; price about one year's returns.

**NORFOLK;** returns £850 under manager; General ready-money profitable Retail and Prescribing, with good connection for packed goods, which by a pushing man can be very considerably increased; price about £600 or valuation.

**DURHAM COUNTY.**—Light Retail, Prescribing, and several good Proprietary goods; returns £700; price £570.

**£1,380 RETURNS.**—Dispensing and Light Retail, in fashionable Southern Watering-place; commanding position; price £1,000.

**MIDLANDS.**—General Retail, Prescribing, with large sale of own specialities; returns over £1,000; net profit £400; price £700 or valuation; vendor entering medical profession.

**CORNWALL.**—Light unopposed Retail, Dispensing, and Prescribing; returns £450, increasing; agency nearly pays rent and taxes; price £250.

**LONDON, S.E.**—Light Retail, Dispensing, and Prescribing (in consequence of dissolution of partnership) in improving district; no opposition; returns £440; price £325; open to offer to immediate buyer; long garden, good house.

**BUSINESSES FOR DISPOSAL.**

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**A**N old-established Prescribing and Retail Drug Business for transfer at a nominal sum; double plate-glass front, roomy premises; good position in leading thoroughfare; to a prompt purchaser £150. For full particulars address "Dens," 46 Hardinge Road, Ashford, Kent.

**OLD-ESTABLISHED** good-class Dispensing and Family Business; 30 miles out; good house; large warehouse; lease; low rent; several proprietaries; returns £800. Price and particulars of "Nemo," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**LANCASHIRE.**—A Chemist's Business to be sold; nicely fitted shop; in main thoroughfare of rising and thickly populated neighbourhood; good dwelling-house; investigation; satisfactory reasons given for disposal; fair offer will be accepted from cash purchaser. Apply, Sagar, Chemist, Nelson.

**LONDON, S.W.**—Dentist, Chemist, and Botanic Practice; old-established; main road; rent £55, on lease; good house and shop, well stocked, &c.; returns about £400; cash price £250, including valuable proprietary articles; a bargain; cause of leaving, death. Address, "Botanic," Walker & Troke, 82 City Road, London.

**RARE OPPORTUNITY.**—An old-established Chemist's Business, which can be improved; lately used as a surgery; neatly fitted; suitable for either Chemist or Surgeon; stock and fixtures very cheap; no reasonable offer refused; proprietor retiring to private practice. Apply, Newton, Clay, Dod & Co., 52 St. Anno's Street, Liverpool.

**£100 CASH.**—Birmingham, healthy part; first-class Prescribing and Light Retail with Dentistry; all ready-money trade, good prices; house containing drawing, dining, and three bedrooms, kitchen, yard, and garden; rent only £25; handsomely-fitted shop; satisfactory reason given for disposing. R. Sanders, 182 Broad Street, Birmingham.

**THIRTY** Miles of London.—Market town; old-established Retail, Dispensing, and Prescribing Business; returning £500, solely under manager; full prices obtained; anyone understanding agricultural trade could double returns; 9-roomed house, warehouse, garden, and fruit-trees; price £400, simply value of stock, &c. J. B. C., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**NORTH OF SCOTLAND.**—Chemist's Business for transfer; long established; desirable locality; price only of stock and fixtures; no heavy trade. Apply to Messrs. Barron, Harvey & Co., Giltspur Street, E.C.

**WEST** Coast of Scotland.—Chemist's Business, established over 50 years, situated in best part of town, for sale at valuation of stock and fittings, to immediate purchaser; season begins shortly. Apply, R. Munro, Chemist, Dunoon.

**OLD-ESTABLISHED** Business; good town in the Midlands; cash Retail trade; excellent house and premises; on lease; cash price £600, or with Branch preferred, £700; good reason for disposal. A. Z., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**YORKSHIRE.**—Mixed Business, returning over £500, at good profits; in thoroughfare; good house and shop; price £350; good proprietaries and teeth-extracting with prescribing; as a going concern. Apply, "Mixed Business," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**NEAR** Tunbridge Wells.—Excellent position in one of the prettiest and healthiest parts of Kent; a good Prescribing and Dispensing Business; plate-glass front; modern fixtures; large house and garden; proprietor taking larger concern. Particulars of A. C. Farmer, Chemist's Valuer, 108 London Road, Southborough.

**KENT.**—For immediate disposal by valuation of stock and fixtures, a small Business; established over 50 years; no other Chemist within 3 miles; convenient house with garden; rent £30; population 3,000; proprietor retiring from business; a good opportunity for a pushing man. Apply to "Chemist," Green Street, Teynham, Kent.

**FOR** Disposal, in the best suburban position of a large town in the West Riding of Yorkshire, a genuine Drug Business, with good dispensing connection; light retail and fancy trade; no heavy; returning about £2,000 per annum; excellent house and business premises, which can be had on lease; about £1,500 required. Apply, in the first instance, to "Hydrargyrum," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**TO HOMOEOPATHIC CHEMISTS.**—Advertiser will be glad to communicate with a Homoeopathic Chemist willing to purchase a new business in Edinburgh, the proprietor of which has just died; the stock and fittings cost about £280; the shop, of which there is a two years' lease to run, is situated in one of the principal thoroughfares, and there is only one other business of the kind in the city; there is a good opening for an intelligent and pushing man; easy terms could be arranged. Address, "Chemist," Messrs. Robertson & Scott, Hanover Street, Edinburgh.

**BUSINESSES WANTED.**

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**L**IGHT Retail and Dispensing Business, with a net profit of not less than £300 per annum; Assistantship with view to purchase preferred; cash ready. Full particulars to "Verax," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**WANTED,** Opening for Chemist or Chemist and Grocer, in moderate-sized town in Herefordshire, West Gloucestershire, or North Monmouthshire; or purchase small Business capable of extension. Assistant informing would have situation and bonus, if successful. Apply "Wye," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**WANTED,** provincial or country town Business; death vacancy; management with view to succession; no objection to large village; unopposed Mixed; good house, not less 4 bed-rooms; open to join suitable partner to take larger concern; capital about £400; strictest confidence; no agents. 287/21, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**TENDERS.**

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**SALE BY TENDER.**—Splendid Mahogany Counters and Door, Window Fittings, Stock, Tincture, Lozenges, and Powder Bottles, Ointment and Ext. Jars, Mahogany Drawers, Shelves, and Glass Cases; may be seen any time. Apply, T. Parker, Chemist, York.

**TO CHEMISTS AND DRUGGISTS.**  
GENUINE SALE.

**TENDERS** are invited for the Stock-in-Trade, Fixtures, and Fittings of the old-established Chemist and Druggist's Business carried on by Mr. Jacob Wyke at 51 Cross Street, Abergavenny. Same may be viewed at any time by appointment, and inventory seen on the premises. The highest tender will not necessarily be accepted. Tenders must be sent not later than May 20, 1889, to Mr. Jacob Wyke, 51 Cross Street, Abergavenny.

**TO LET.**

**C**ENTRAL Business Premises to let (immediate possession); grand position, facing market-place (shop will be divided and let separately if desired); double plate front; counters and fixtures; house, 12 rooms, separate, or with either half-shop; splendid opening; population 6,000; rent moderate; see photograph. G. Maynard, Shepton Mallet, Somerset.



## PARTNERSHIPS.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**PARTNERSHIP** in good-class Dispensing and Family Business, with a view to succession on mutual terms; first-class references; no agents. Full particulars to "Partner," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**A QUALIFIED CHEMIST** desires a Partnership in a small, but sound, Manufacturing or Wholesale Business; all replies will be treated with strictest confidence; no agents. Address, Mr. Jay, care of C. A. Johnstone, Esq., St. Peter's Gate, Nottingham.

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3s. 6d. for fifty words; 6d. for every 10 words beyond.

**H. PARLBY**, Dispensing and Photographic Chemist (opposite Albert Hall), Swansea, requires an Apprentice; in or out doors.

**TO** Parents and Guardians.—Wanted a Youth as Apprentice; aged 17 years; indoor; comfortable home. Apply, J. F. Fieldsend, The Pharmacy, New Southgate.

**APPRENTICE** wanted by a Chemist, 30 miles from town: a very comfortable home and every attention is offered to a suitable lad. Apply, M. T., Messrs. Newbery, King Edward Street, Newgate Street, London, E.C.

## SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**WANTED**, a Man well acquainted with Nitrous Oxide Gas. Apply, by letter, to George Root, 135 Upper Kennington Lane, Vauxhall.

**AN** Assistant, about 21, of good address; one with experience in high-class Retail and Dispensing. J. Wyld, 8 Station Road, Westgate-on-Sea.

**JUNIOR** Assistant, for a Light Retail and Dispensing Business; age about 22. Apply, J. W. Stirling, Chemist, 86 High Street, Whitechapel, E.

**QUALIFIED** Assistant wanted: good salary given to a suitable man; salary progressive. Apply, between 11 and 12, to Lacy & Co., 94 Whitechapel Road, London, E.

**DISPENSER** wanted, immediately, to take entire charge of Dispensing room. Apply, stating age, height, salary required; and enclose photo, to S. Wand, Chemist, Leicester.

**WHOLESALE**—Clerk required, accustomed to Bookkeeping; state age, salary required, and last situation. Apply by letter, S. G., care of H. Good & Son, 12 Moorgate Street, E.C.

**JUNIOR** Counterman wanted, and to assist in Dispensary; must be good Salesman. Apply by letter only, with full particulars, G. C. Dusart, Sussex Drug Co., Limited, Hastings.

**WANTED**, a duly qualified Dispenser, for the Leeds Public Dispensary; salary at commencement £80; applications with testimonials to be sent at once to me. J. Swale, Secretary.

**WANTED**, an active and obliging Assistant, where three are kept; outdoors; state age, height, and salary required; references and photos will be returned. Applications to Reinhardt & Sons, Leeds.

**THOROUGHLY** competent Managing Clerk for a Wholesale Druggist's Office; first-class experience and references indispensable. Apply, stating salary, to X795, care of Messrs. Deacon's, Leadenhall Street.

**OUTDOOR** Assistant; must be a competent dispenser, good counterman, and possess the Minor qualification. State salary required, height, age, and references, and enclose photo, to Hicks & Co., Cardiff.

**OUTDOORS**.—Wanted, energetic Assistant, accustomed to first-class trade; must be good salesman and competent to dispense; enclose testimonials, O.D.V., and state salary required. Goulding & Co. (Limited), Cork.

**WANTED**, immediately, Dispenser, 6 to 9 every evening; unmarried; age about 25; must have reference to last employer. Apply, Dr. Smith, 111 Keetons Road, Bermondsey, near Spa Road Station, South-Eastern Railway.

**QUALIFIED** Assistant, to manage Mixed Country business for Widow; indoors; not under 30; must be strictly temperate, and references unexceptionable. Apply, C. H. Warner & Co, 55 Fore Street, E.C.

**WHOLESALE**.—Wanted a young man with experience, and capable of taking charge of the Wet Room of a provincial wholesale druggist. Address, with particulars, to "Rhei," care of Meggeson & Co. Miles Lane, London.

**WANTED**, immediately, experienced Assistant; Scotch. Reply, stating age, lowest salary indoors, and enclose copy of testimonials and last reference, to Evans, Sons & Co., 55 Hanover Street, Liverpool.

**WANTED**, at once, Junior Dispenser, Drug Department, Haymarket Stores; outdoors; hours 9 to 7; Minor qualification. Apply, by letter only, stating salary required, &c., to The Chemist, 28 Haymarket, S.W.

**ASSISTANT** (May 1st), indoors, about 23, for Branch Cash business, N.W.; must be quick, and an accurate Dispenser. Apply, stating experience, salary, &c., enclosing carte, to X., Messrs. Hodgkinson & Co., 198 Upper Whitecross Street, E.C.

**WANTED**, at an early date, an Assistant, one recently qualified, unmarried, indoors, for a small Country Business. Apply, stating age, salary required, reference, enclose photo (to be returned), to Mrs. Hall, High Street, Kelvedon, Essex.

**WANTED**, for the Australian Colonies, a man who thoroughly understands Sugar-coating Pills; liberal salary and free passage. Apply, giving full details as to qualification, &c., to Z, care of Editor of this Journal, 42 Cannon Street, London, E.C.

**WANTED**, a Qualified Assistant; indoors; about 22 to 24; accustomed to Dispensing and to a good-class General country business. Apply, with full particulars of age, height, and former engagements, to Dunhill & Stiles, Pharmaceutical Chemists, Doncaster.

**R. JEFFREY & SON**, Cheltenham, have a vacancy for a reliable Assistant; aged about 23; one only kept; Churchman and abstainer preferred; must be good dispenser; please state usual particulars and salary required. Applications not answered in three days declined.

**MAY 18**.—Junior Assistant (indoors; sleep and room found), in a light retail and dispensing business; aged about 21; able to dispense, prescribe, and left in charge occasionally. Apply, stating age, salary height, with reference (last employer), enclosing photo and stamped envelope, to John Lea, Folkestone.

**WANTED** immediately, an experienced Assistant (indoors); must be quick, and a thoroughly reliable dispenser and good salesman; accustomed to good-class general country business. Enclose photo, references, and salary required, to C. F. Loggin, Chemist, Stratford-on-Avon.

**WANTED**, by May 9, a steady Assistant, for a small Retail and Prescribing Business; must be a good salesman and able to extract teeth; hours 8 to 8; Saturdays, 11; Wednesday, half-holiday; no Sunday duty; unfurnished rooms over shop for married man. Thomas Buck, 9 East Street, Middlesbrough.

**JUNIOR** (21–25) wanted immediately, for middle class Light Retail; satisfactory references as to ability and character indispensable. State age, height, experience, references, salary required (indoors), and enclose photo (to be returned), to Matthews & Son, Chemists and Dentists, Post Office, 167 Cambridge Road, N.E.

## SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

**JUNIOR** (22); Minor; town or suburbs preferred. W., Lawn House, Poplar.

**IMPROVER**; 4 years' experience. C. T., 29 Queen Margaret's Grove, Mildmay Park, N.

**JUNIOR**; 19½; passed Preliminary; nearly 4 years' experience. "Plough," Narberth.

**IMPROVER** (20½); 6 years' experience. F. H., 14 York Street, Whitefield, near Manchester.

**MANAGER**; qualified; aged 30; 5 ft. 10 in.; extract. Brook, Norfolk Street, Hyde.

**AS** Branch Manager; 20 years' experience; highest testimonials. Wilkins, Seckford Street, Woodbridge.

**DISPENSER**, Chemist, Surgeon, or Public Institution; good testimonials. E. R., 35 Bond Street, Swansea.

**TEMPORARY**; day or week; well up in Dispensing and Prescribing. "Chemicus," 34 High Street, Putney, S.W.

**ENGAGEMENT** wanted as Assistant; good experience and references; salary moderate. Divers, Boston Spa.

**MANAGER** or Locum-Tenens; good Prescriber; experienced; qualified. J. M., 2 Pixholme Grove, Dorking.

**ASSISTANT**; Mixed Country Business. S. E., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**AS** Assistant or Manager; aged 26; height 5 ft. 7 in.; Minor. R. Troughton, jun., Kirkby Stephen, Westmoreland.

**WHOLESALE**.—Wet Counter, or Traveller; over 8 years' experience; highest references. R. B., 182 Southwark Park Road.

**IMPROVER**, aged 23; well up in Dispensing, Prescribing, extracting teeth; good references. Jones, Southport Road, Ormskirk.

**AS** Junior in good Dispensing business; Manchester preferred; aged 24. Gillies, Albion Pharmacy, Mossley, near Manchester.



**AS-MANAGER**, or experienced Assistant; aged 27; qualified; at liberty May 6. E. Wade, 49 Abbey Road, St. John's Wood.

**ASSISTANT** or Manage Branch; aged 31; single; unqualified; indoors and permanency preferred. Sumbus, Aston, Nautwich.

**ASSISTANT**; part or whole time; 12 years' experience. "Juro," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**ASSISTANT**; in Manchester or district preferred; aged 23; good reference. "Alpha," 32 Rochester Street, Queen's Park, Manchester.

**COMPETENT** Assistant; aged 27; 12 years' good experience; permanent or locum-tenens. F. F., 25 Trevor Square, Knightsbridge, S.W.

**BROAD.**—Assistant; aged 24; 8 years' experience; disengaged July 6; Dentistry, French. Ellis, Buckleigh, Kingsley Road, Cotham, Bristol.

**TRAVELLER**; Drug or Sundry trade; sound connection; references and security. 267/7, Office of the CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**DISPENSER** to a Surgeon or firm; aged 30; many years' experience; highest references. Terms, &c., to R., 20 Kensington Crescent, London, W.

**WANTED**, an afternoon and evening post; aged 35; Minor and University medical education; terms nominal. "Sigma," *British Medical Journal*, 429 Strand.

**ENTIRE** Management of country Business by Registered Chemist; 30 years' experience; salary 30s. per week, without board. A. Z., 458 Mile End Road, London, E.

**BRANCH** Manager or otherwise; good experience and references; successful as Branch Manager; qualified. W. S. J., Mr. Langhelt, Addington Street, Ramsgate.

**LOCUM-TENENS** or Assistant; aged 25; 10 years' experience in Drug trade, Wholesale and Retail. 267/7, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**AS** Dispenser or Assistant (outdoors); qualified; good reference and experience; aged 26; abstainer; height 5 ft. 8 in.; can extract teeth. "Assistant," The Grove, Kettering.

**PART-TIME** in London; aged 20; salary no object; Cambridge and Preceptors' certificates; season's experience in fashionable resort; outdoor. 37 High Street, Wigton, Cumberland.

**WANTED** by Junior, 18 years old, tall, good appearance, situation in good house (indoors preferred). Address, "Druggist," William Porteous & Co., 15 Royal Exchange Place, Glasgow.

**AS** Manager of small good-class Business in large town; with or without view to succession; 9 years' experience. Charles Turner, Pharmaceutical Chemist, 82 Lincoln Road East, Peterboro'.

**AS** Temporary Manager or Assistant; many years' experience in London and country; first-class references; disengaged after the 27th inst. "Chemist," 54 Weltje Road, Hammersmith, W.

**F. R. FLINTAN**, from Corbyn & Co., would like to meet with a firm who require a Junior Assistant in a good-class Dispensing business; London preferred. Apply, Flintan, Chemist, Chertsey.

**ADVERTISER**, middle-aged, not married, abstainer, trustworthy; either to manage small Retail or assist in Wholesale or sundries; good references. Apply, B., 8 Park View, Manor Road, Liscard, Cheshire.

**WHOLESALE**, or good Country Retail, by a married man, who has had long and varied experience in both branches of the trade; good laboratory man. Address, "Drugs," 101 Watson Street, Birkenhead.

**A** **COMPETENT** Senior Assistant desires an engagement in a first-class Drug house, Wholesale or Retail; would accept a situation abroad. Address, 89, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**TO** Manufacturers, &c.—Influential experienced young man, leading Drug and Sundries house, Dublin, open to represent above in Ireland; direct reference; security. "Agent," care of Mr. West, 13 College Green, Dublin.

**ASSISTANT**, in high-class Dispensing and good Retail Business; must be willing to make himself generally useful; a personal interview preferred. Apply, with usual particulars and photograph, to Mr. Gregory, Wellington, Somerset.

**A** **YOUNG** man, aged 21. Protestant, tall, good appearance, quick, good server, speaking English and French fluently, requires a place as Improver; good references; preference for the South Coast. Address, Miss C., Evington Place, Ashford, Kent.

**WHOLESALE** or Retail; varied experience in both; highest references; aged 21; good appearance and address, and an abstainer. Apply, X. Y. Z., care of Messrs. Jno. Richardson & Co., Wholesale Manufacturing Chemists and Druggists, 10 Friar Lane, Leicester.

**TO** Manufacturers and Wholesale Houses.—Experienced Traveller, just resigning agency for a speciality, is desirous of representing a good firm in sundries, &c.; calling on chemists, druggists, grocers, and stores, London and suburbs. Address, J. W. K., 28 Windsor Road, Holloway, N.

**MANAGER** or Senior (outdoors), or as Locum-Tenens; aged 40; qualified; knowledge of best markets, experienced all round; accustomed to present cutting competition; tact and experience as Salesman, Extractor, Prescriber, or Laboratory, to revive a decayed business or establish a new one; reference and testimonials; disengaged. Walker, 20 Alico Street, Leicester.

**YOUNG** Lady desires employment as Clerk; 8 years' office experience, and has been for a considerable time employed in the office of a large firm of wholesale druggists and manufacturing chemists; certificated bookkeeper, good knowledge of French; excellent references; moderate salary. Address, R. D., 36 Blakesley Street, Commercial Road, E.

**DRUGGISTS**, Drug Brokers, Perfumers, and Druggists (Wholesale).—Advertiser, thoroughly competent, last 10 years forwarding clerk to Messrs. Burgoine, Burdidge, Cyriax & Farries, desires Re-engagement as above; or as Invoice Clerk (senior), Cost Ledger Clerk, or position of trust, where energy and ability will be appreciated and met with fair remuneration; abstainer. Address J. W. Wright, 46 Farrant Avenue, Wood Green, N.

## MISCELLANEOUS.

*Special charges are made for Advertisements under this heading, which can be obtained on application.*

**WONDERFULLY** convenient Pocket Inhaler and Medicament, bearing immense profits; patent for sale; highly recommended; owner, being otherwise fully engaged, cannot properly work it and would accept reasonable offer. Address, W. P. C. E., 27 Walbrook, E.C.

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**BOXES**.—Light Wood Boxes, suitable for Grocers, Confectioners, Druggists, &c., for sending all kinds of articles by post or rail; cheapest, strongest, and lightest; samples, six stamps. Write for samples, stating size required, to Casbon's Joinery and Box Works, Millfield, Peterborough.

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GOWER, 4 Lancing Road, Ealing, London (late of Hackney).

## CHEMISTS, CORONERS, AND THE SALE OF CHLORAL.

*Vide* CHEMIST AND DRUGGIST, March 30, page 419.—Chemists would do well to relieve themselves of all moral and legal responsibility by supplying Hunter's Solution of Chloral when asked for Sleeping Draughts, &c.

ROUSE, WIGMORE STREET, LONDON, W.

## PRELIMINARY AND MINOR.

**ALL** Students who are preparing should send for particulars of a method of study which will enable them to pass with ease. Enclose stamped envelope to Mr. J. Tully (Hills Prizeman), Chemist, Hastings. Established 1872. References to past and present Pupils. 32 Pupils passed the last Examinations.

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# CAUTION!

## WARNER'S "SAFE" CURE.

In the High Court of Justice, Chancery Division.

**H. H. WARNER & COMPANY v. J. WARNER.**

NOTICE IS HEREBY GIVEN that on the 1st day of March, 1889, Mr. Justice Stirling ordered that the Defendant, his servants, and agents, be restrained until Judgment in this action, or until further order, from selling, or advertising, or offering for sale, any medical preparation not of the Plaintiffs' manufacture, so as to lead to the belief that the said preparations are the goods of the Plaintiffs.

The Defendant having appealed from this decision, the Lords Justices of Appeal on the 20th day of March, 1889, confirmed the order of Mr. Justice Stirling, and dismissed the Appeal with costs.

Dated this 26th day of March, 1889.

ERNEST SALAMAN, 65 and 66 Chancery Lane.

*Acting as Solicitor for the Trade Marks Protection Society.*

The attention of Chemists, Medicine Vendors, and the Public generally is called to the above decision and judgment. All similar attempts at imitation and infringement of our rights will be summarily prosecuted.

**H. H. WARNER & CO.,**

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SOLE PROPRIETORS

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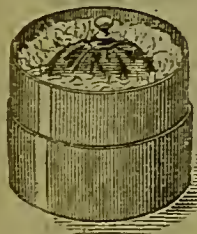
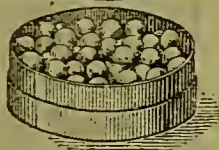
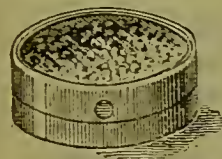
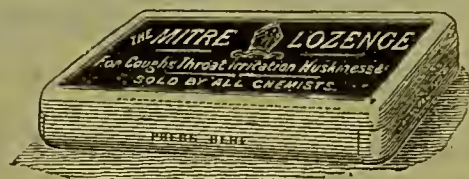
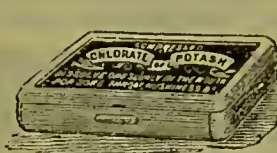
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These Boxes are specially suitable for pocket use, being free from all sharp or pointed corners and projections, and are supplied, when required, with labels on lids bearing special inscriptions printed in gold, in lots down to 5 gross at a time.



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PARTICULARLY RECOMMENDED for triturated and viscous articles, as,  
owing to their *special* construction, the lid combines closeness of fit and  
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{ Camphor Boxes and Camphor Locketts (filled with best English Refined  
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MEDICAL SPECIALITIES.—Pocket Urine Test Case (fitted for Dr. GEORGE JOHNSON'S and Dr. PAVY'S tests),  
Pocket Hypodermic Syringe Case (designed by Dr. TALFOURD JONES).

WHOLESALE AND RETAIL OF DRUGGISTS' SUNDRIESMEN THROUGHOUT THE KINGDOM.

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This section of "The Chemist and Druggist" must be closed for press by Thursday noon of each week.  
Remittances payable to EDWARD HALSE.

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Advertisements in this department must be paid for in advance. From this rule no deviation can be made. Insertions are charged at the rate of  $\frac{1}{4}$ d. per word, provided the advertiser attaches his name and address, for each word of which he must also pay at the same rate; or if he pays 1d. per word, his name and address will be registered and a figure attached to his advertisement. All correspondence referring to that figure must be addressed to "The Publisher of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.," and the figure must be distinctly endorsed upon the envelope. Letters will then be forwarded to their proper destination. A price is counted as one word, as e.g., £1 10s. 6d.

**DEPOSIT OF MONEY.**—In order to ensure safety we offer the following system:—The purchaser of anything advertised in the Exchange Column may remit the amount to us, accompanied by a commission of 6d. if the amount is £3 or under; and 1s. if over that sum. We acknowledge receipt of deposit to both parties, and hold the money until we are satisfied that either the goods are returned to their original owner or the purchase is completed.

Postal orders and cheques sent as deposit must be made payable to Edward Halse, and crossed "Martin & Co."

## FOR DISPOSAL.

### Literature.

*Pharmaceutical Journal*, 1888, 5s., or anything useful. Cooper, Chemist, Aldeburgh, Suffolk.  
*Veneral Diseases*, Bumpstead & Taylor, quite new, published price 28s.; what offers? 259/25.

*Chemist and Druggist*, 1887, 1888, 1889, and to end of March 1889; *Diaries*, 1887, 1888, 1889; offers wanted, all or part. "Plant," Gorton, Manchester.

### Educational.

Attfield's "Chemistry," Lescher's "Pharmacy," "Pereira," Cooke's "Botany," Muter's "Key Organic Materia Medica"; will take 10s. E. Ching, Witham, Essex.

### Drugs and Chemicals.

Quantity sulphate soda (salt cake), in 2-cwt. sacks, very cheap; sample on application. Hargreaves, Preston.

### Formulæ.

Reliable recipes, 6d. each; full set of 130 neatly copied in book, 7s. 6d.; send for list. "Chemist," Edwards, Wye, Kent.

Genuine receipts, with instructions how to work them, 2s. 6d. each, 5 for 10s.; soluble essence ginger, clear miscible chlorodyne, pepsine wine, acid glycerole pepsine, liquor santal enbeeb buchu (soluble), cascara cordial; state wants. McDonald, 75 Lennox Road, Finsbury Park.

### Soda-water Machinery

Two large generators and gasometers, complete with pipes, fittings, improved acid tanks, purifiers, &c., cheap. Address, Manager, Chemists' Aerated and Mineral Waters Association (Limited), Bristol.

### Shop Fittings.

18 4-lb. pink shop-jars, Maw's fig. 13, gilt mouldings, and space for label, beautifully finished; 4s. 6d. each. 263/7.

18 1-lb. pink shop-jars, with shield space for label, Maw's fig. 12, richly gilt and decorated; 2s. 9d. each. 263/7.

Drawers.—Several nests very cheap; also dispensing screen, desks, &c. Philip Josephs, 54 Old Street, Goswell Road, London, E.C.

Bent plate-glass counter-case, 7 ft. 6 in. long, 21 in. wide, very good, second-hand, price 7l. 10s.; also one 5 ft. long, as Maw's A18, price 5l. Philip Josephs, 54 Old Street, Goswell Road, London, E.C.

Ointment jars (job line), blue canopy tops, 4-oz. 4s., 8-oz. 6s., 1-lb. 8s., 2-lb. 16s. per doz.; English shop rounds, all sizes, 3s. 6d. to 9s. doz.; counters from 5s. per foot, lineal measure; drawers; mirrors, all sizes; counter, wall, tooth-brush, dispensing, and other show-cases; carboys, specie jars, and a variety of other shop fittings ready for use; half usual prices. Natali & Co., 181 Aldersgate Street (nearly opposite Maw's).

### Miscellaneous.

Poppy-heads, 5s. per 1,000, bag 6d., sample 3d.; crushed 10s. owt. Connor, Doncaster.

Cash or exchange; cheap Indian rubber mattress, 5 ft. by 3½ ft.; equal to new. "Chemist," 35 Junction Road, N.

Microscopic objects; thousands cheap; cash or exchange; see last week. Henry Ebbage, 344 Caledonian Road, London.

Materia Medica cabinet, Tully's, suitable for Minor students; offers. Smith, 7 Seymour Terrace, North Finchley, N.

Quantity of hand-made pint cans, have held petroleum; 3s. per 100. Thompson, Bedworth.

Chemical apparatus.—Gilt urinometer, tooth forceps, pocket case, tongue depressor, bougies, catheters, probang, and microscopic slides. Offers to "Zeta," 1 Argyle Terrace, New Town, Great Yarmouth.

A 2-bottle Macdonell patent bottling machine, with syrup pump and latest improvements; has been very little used, and is in good working order. Apply to Ray & Son, 1 Artillery Row, Victoria Street, S.W.

Aspinal's enamel, any colour, 9s. 3d. doz.; bath, 11s.; Freeman's 2d. perfumes, 13s. 3d. gross; Jeye's purifier, galls, drums included, 3s. 3d.; la brillantino, 5d., 2s. 8d., 4s. 9d. doz.; all new and quite clean. Knott, Ashbrook Road, Upper Holloway, N.

*The Chemist and Druggist* for 1881, complete 1882, 11 months; 1883, 9 months; 1888, 8 months; 1885, 8 months; 1886, January to November; 1887 and 1888, complete; also Maw's brass scales on mahogany stand, perfect order, total height 22 inches; offers? Fraser, Forres.

Bracher's automatic still, copper, good as new, cost 2l. 10s. in November, offers; 3 earthenware inhalers, Bourne's fig. 360, 1s. each; 1 dozen Lee's bottle-cleaners, 1s. 6d. dozen; 1 Maw's sponge-case, pyramid shape, enamelled, 5s.; 1 Clarke's adjustable bed-tray, 7s. 6d.; new; cash or references. F. E. Rookledge, Easingwold, Yorks.

Several thousand microscopic slides; all sciences represented; sent for selection, from 5s. doz. Have the following for disposal:— $\frac{1}{4}$  objective, Smith & Beck, 40s.;  $\frac{3}{8}$  ditto, 30s.;  $\frac{1}{2}$  Collins', with correction collar, 3l.; 500 pinc cabinet, 35s.; 1,000 ditto, 45s.; paraboloid, 15s.; triple nose-piece, 20s. E. Clarke, 145 Staustead Road, Forest Hill.

Declining business.—On sale, cheap, 3 ft. diam. mixer, with steel scrapers, new, cost 36l., will take 18l.; also a large quantity of turned wood pillboxes, 1½ in. diam. by ¾ in. deep outside, cases of 53 gross 9d. per gross, small lots 1s. per gross; and 2 in. diam. by 1½ in. deep, 3s. per gross; small piping-press, &c., &c. Parkinson, 39 Dover Street, Manchester. Wonderful bargains; must be sold.

## WANTED.

Myers' cattle spice. State quantity and lowest price to J. W. W., 8 Boulevards, Halifax.

Dental show-case for outside, cheap; also artificial teeth for same. Garry, Tulse Hill, S.W.  
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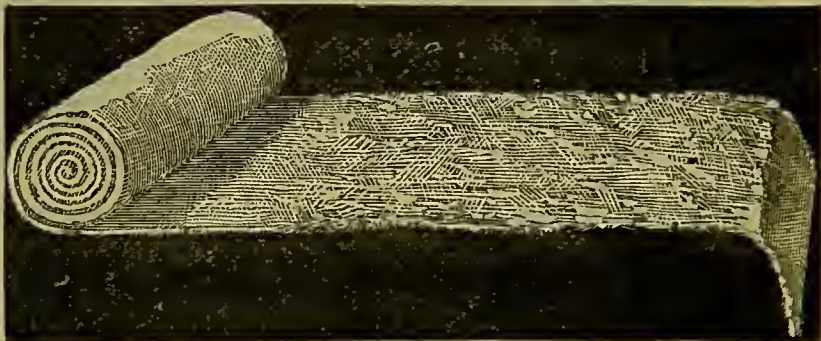
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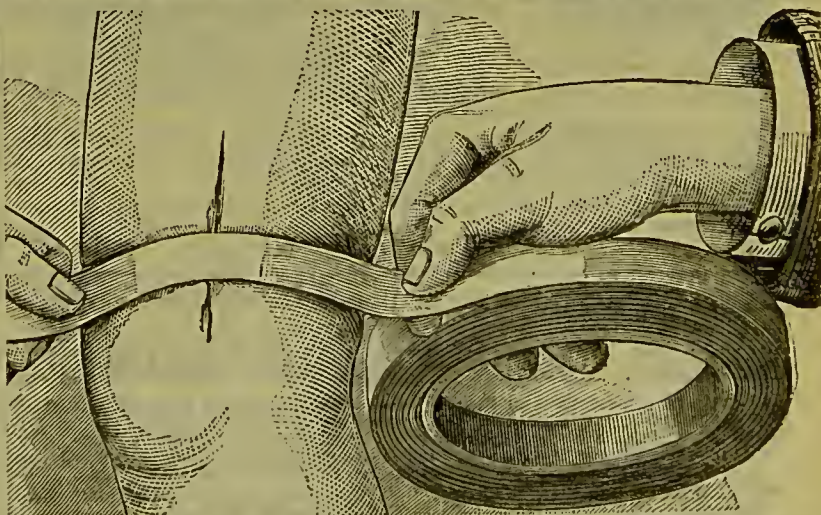
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## MINORS.

Mr. T. L. Hollely	Mr. H. E. Spurr	Mr. J. Bates.
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# THE CHEMIST & DRUGGIST OF AUSTRALASIA. MARCH 1, 1889.

## CONTENTS OF NO. 3, VOL. IV.

**Editorial Notes:**—"Intercolonial Reciprocity"; "The Accounts of the Pharmaceutical Society of Australasia"; "The Aim of Study"; "The Pharmaceutical Society of New South Wales"; "How are Chemists to get Apprentices"; "The Price List Question"; "Chemists' Labels and Chemists' Printing"; "Photography and Photographic Apparatus and Materials for Chemists"; "The Dentists Register of Victoria"; "Strychnine in Snake Bite"; "The Pharmaceutical List of Queensland."

## COLONIAL REPORTS.

**New South Wales.**—Pharmacy Board (Official Report of Monthly Meeting); Pharmaceutical Society (Official Report of Monthly Meeting); Comments on Pharmaceutical Matters; Trade and General News.

**New Zealand.**—Pharmacy Board (Report of Ordinary Meeting) The United Friendly Societies' Dispensary, Invercargill; Trade Items.

**Queensland.**—Pharmacy Board (Official Report of Monthly Meeting); Pharmaceutical Society (Official Reports of Monthly and Quarterly Meetings); Trade Notes.

**South Australia.**—Pharmaceutical Society (Official Reports of Monthly Council and General Meetings); Comments on Pharmaceutical matters; Trade News.

**Tasmania.**—Reciprocity with Victoria; General News.

**Victoria.**—Pharmacy Board (Reports of Monthly Meeting); Pharmaceutical Society (Report of Monthly Meeting and Annual Report of the Council of the Pharmaceutical Society of Australasia for 1888); the Veterinary Board and Veterinary Act; General Trade News.

**Correspondence.**—How are Chemists to get Apprentices? Reciprocity of Pharmaceutical Diplomas.

Dispensing Notes; Photograph; Intercolonial Medical Congress of Australasia; Abstract of Papers; Centennial International Exhibition; Reports of Juries and Lists of Awards; Pharmaceutical Education—an Article recording the requirements of the Examining Bodies in the different colonies and the provisions made for meeting those requirements in the various Universities and Schools throughout Australasia, in the subjects of Medicine, Pharmacy, Veterinary Surgery, Dentistry, Chemistry, pure and applied.

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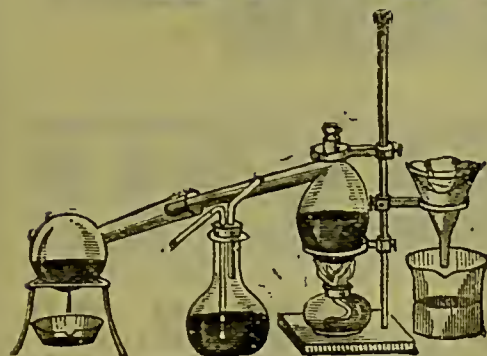
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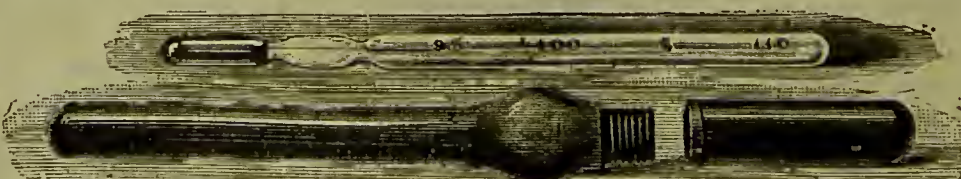
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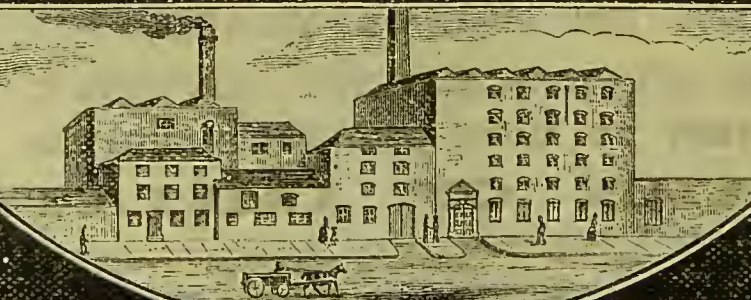
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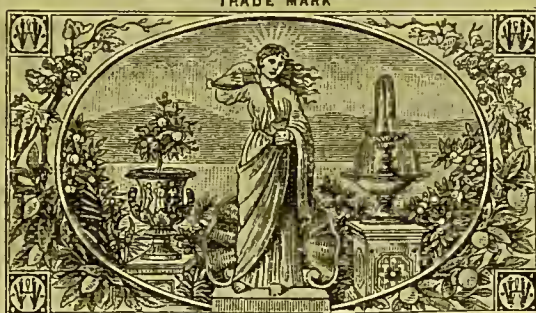
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SELTZOGENES REPAIRED, REWIRED, & TESTED BY EXPERIENCED WORKMEN.

POWDERS FOR SELTZOGENES AND GAZOGENES.

*Illustrated Price List on application.*



## JOHN OWEN, JUNIOR,

PACKING CASE MANUFACTORY AND STEAM SAW MILLS.

ESTABLISHED 1840.

37 & 38 MINORIES, LONDON, E.C.

MANUFACTURER OF

Cases of every description for Home use and Exportation.

Wine Laths, Oak and Deal.

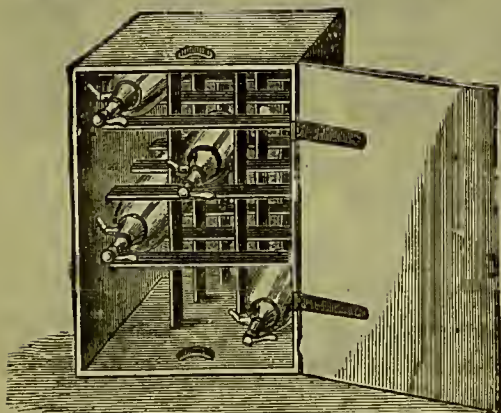
Mineral Water Bin Cases and Trays.

Bottle Crates. Straw Envelopes.

Cases Lined with Tin, Zinc Copper, &c.;

ALSO MANUFACTURERS OF THE

"Acme" Incubator & Poultry Appliances.



PRICE LISTS FORWARDED ON APPLICATION.

EXPORT ORDERS RECEIVE SPECIAL ATTENTION.

## DOULTON & CO., LAMBETH, LONDON, S.E.

MANUFACTURERS OF EVERY DESCRIPTION OF

### WATER FILTERS.

NEW PATENT

Manganous Carbon FILTERS.

Boudoir and Table FILTERS.

Pocket and Syphon FILTERS.

House Supply or Cistern FILTERS.

Patent Granular Charcoal FILTERS.

Refrigerator FILTERS.

### MAIN SERVICE FILTERS

FOR INTERMITTENT OR CONSTANT SUPPLY.

See Reports, Analyses, &c. Detailed Lists on application.

To be obtained of all Dealers.



## DOULTON & CO., LAMBETH, LONDON, S.E.

DEPOTS:—100 Soho Street, LIVERPOOL; Granville Wharf, BIRMINGHAM; and 6 Rue de Paradis, PARIS.



BY ROYAL LETTERS PATENT.

# HASSALL & CO.'S PHOSPHO-CITRIC ACID

Is the Best, Purest, and most Economical Agent for Acidulating all Saccharine Beverages.

Price only **10d.** per lb., in 9 and 18 gallon casks ; **1s.** per lb. in small quantities.

One Ounce Measure is equal to One Ounce of Citric. It produces a higher class Beverage, and shows an economy of between £6 and £7 per cwt.

We do not ask for an order, we merely solicit the favour of a trial.

3-oz. Sample for Postage (3 stamps), or 14 lbs. on approbation.

**PAMPHLET GRATIS.**

## UNSOLICITED TESTIMONIALS.

We are pleased to be able to testify that your Phospho-Citric Acid is satisfactory under the most severe trials. We have placed Manufactured goods in which your Acid was used in a refrigerator for months, and also for nine months in a stove in which the temperature stands at over 150° day and night, and the bottles when examined to-day were as bright as the day they were put in. ———, LONDON.

LEMON STREET, ABERDEEN.

I have pleasure in bearing testimony to the fact that first-class waters are produced, with greater body and finer fruity flavour, at half the cost of Citric ; and further that your Acid is free from all traces of **LEAD**, generally found in the orystals.

I am persuaded that your Acid will ultimately command the Mineral Water Trade.

Yours faithfully, WM. THOMSON.

"And may I also be permitted to add my testimony to the excellence of your Phospho Citric Acid ; I consider it far and away preferable to Citric." O. H. ORTON, STOKE GOLDING.

## FERMENTATION.

When Fermentation is present, Saccharine Beverages made with this Acid will keep sound and bright several days longer than those made with Crystal Acids.

**HASSALL & CO.**  
YORK ROAD, KING'S CROSS, LONDON.

TELEGRAMS:—"REMPUJARON LONDON."



ESTABLISHMENT OF BOULEVARD VOLTAIRE, 162 &amp; 164, PARIS.

GOLD & SILVER  
MEDALSAT ALL  
EXHIBITIONS.

# DURAFORT

PATENTED.

## SYPHONS

OF ALL MODELS

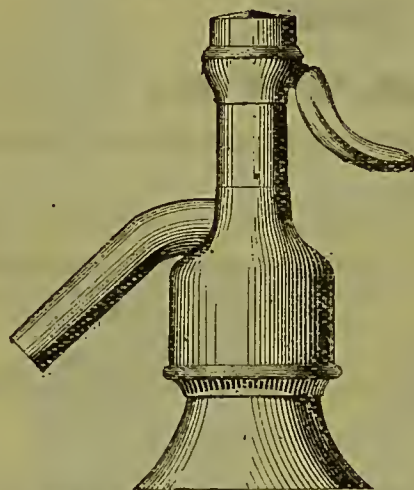
Made of Bright or Ordinary  
Metal,  
and of White or Coloured Glass,  
1st Quality.

## APPARATUS

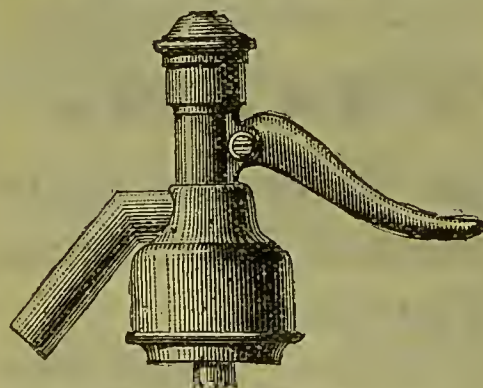
AND

## POWDERS

To Make Seltzer and Vichy  
Waters, &c., &c.



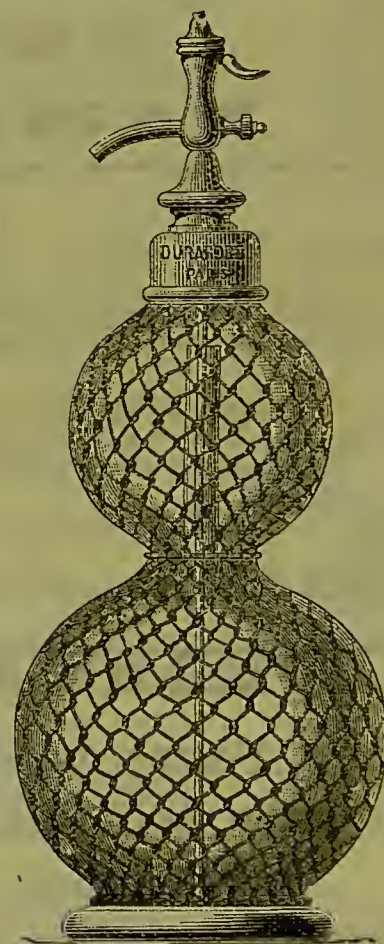
SMALL LEVER.—No. 5.



LARGE LEVER.—No. 10.



SMALL LEVER.—No. 1.



SELTZATEUR.

New Patent Syphons with TUBES entirely made of CRYSTAL for Lemonade and Potash or Soda Water.

We beg to call the attention of our numerous customers to the quality of the material employed in the manufacture of our Syphons. In the bright quality not a particle of lead is employed. The crystal is of the very best quality; each Syphon is guaranteed to be tested before leaving our works.

SODA WATER MACHINES.

FILLING MACHINES.

Our General Catalogue and Price List will be sent free on application. Large Discount for Quantities.



146, MINORIES, LONDON E.C.  
New York  
Sydney

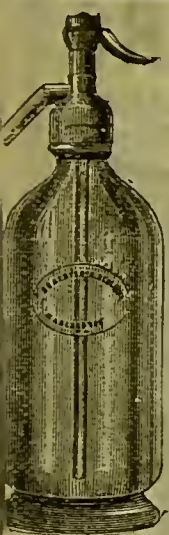
**SODA WATER MACHINERY**

AND ALL ACCESSORIES FOR THE TRADE

**BRATBY & HINCHLIFFE**

HEAD OFFICE  
SANDFORD ST., ANCOATS, MANCHESTER.

BOXES BOTTLES, MACHINERY,  
ESSENCES  
Catalogues, Circulars, Testimonials  
Post Free



# SYPHONS & SELTZOGENES

GREAT REDUCTION IN PRICE.

We have recently been entrusted with a most important Agency for the above-named goods. Our Principals are the best known firm in Paris, and the Syphons are undoubtedly the cheapest and strongest in the market. The tops are made of pure English Tin, guaranteed free from lead. The Seltzogenes are made on the well-known "Fevre" system, and each one is thoroughly tested before being sent out.



WE CAN GIVE TO LARGE AND SMALL BUYERS EXCEPTIONALLY LOW PRICES.  
PLEASE WRITE US AT ONCE FOR PRICES, STATING QUANTITY OF EACH KIND REQUIRED.

# SODA-WATER MACHINERY.

MELBOURNE EXHIBITION, 1889, UNPRECEDENTED SUCCESS.

We have obtained at the above Exhibition

# 3 HIGHEST AWARDS POSSIBLE

A feat never accomplished before by any other house supplying requirements for the Aerated Water Trade.

These awards will carry with them **THREE GOLD MEDALS**, which were awarded as follows:—

- 1st—SODA-WATER MACHINERY (Highest Award possible).
- 1st—ESSENTIAL OILS & FRUIT ESSENCES (Highest Award possible).
- 1st—PATENT AND ORDINARY BOTTLES (Highest Award possible).

WRITE FOR NEW ILLUSTRATED CATALOGUE, POST FREE.

# BRATBY & HINCHLIFFE.

Aerated Water Engineers and Glass Bottle Manufacturers,

SANDFORD ST., ANCOATS, MANCHESTER,

And at 146 MINORIES, LONDON, E.C.



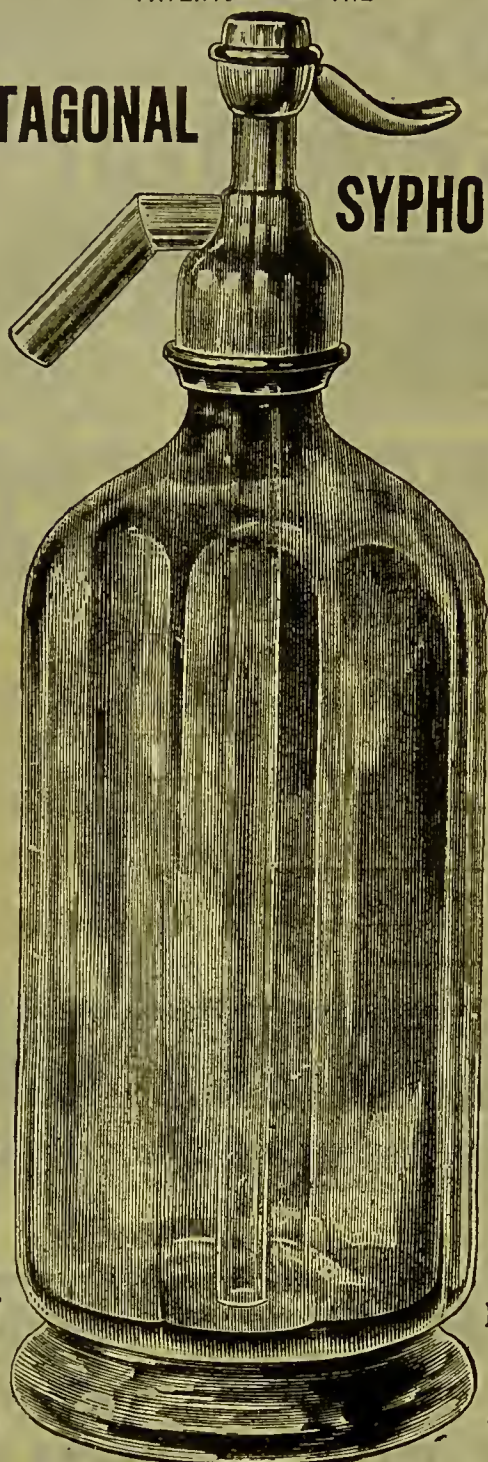
# JAMES VIDIE ET FILS,

Pantin Glass Works,  
PATENTEES OF THE

The "Octagonal" is externally similar to the ordinary Syphon, the interior being blown of an octagonal shape by a new patent process.

OCTAGONAL

SYPHON.

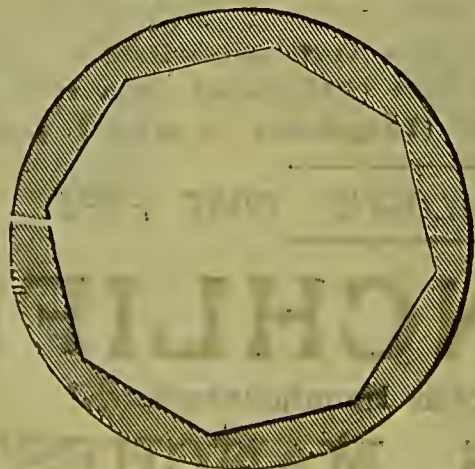


Gives a most brilliant and sparkling appearance to the contents, and can resist double the pressure of ordinary Vases. Greatly recommend our new tint, "AZURE BLUE," which is the best tint for Syphon Vases.

Sample sent on receipt of 2/-

Sample sent on receipt of 2/-

SECTIONAL VIEW.

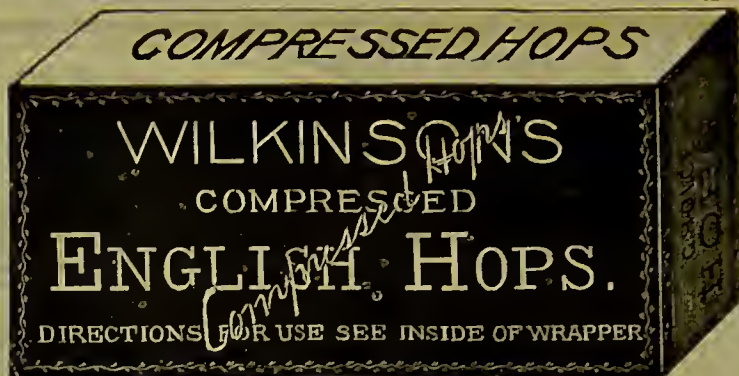


TO BE HAD OF  
ALL MINERAL WATER ENGINEERS.

TO BE HAD OF  
ALL MINERAL WATER ENGINEERS.

SOLE AGENT:

C. MELIN, 37 CRUTCHED FRIARS, LONDON, E.C.



SAMPLES AND PRICES ON APPLICATION.

Address, **A. WILKINSON & SONS,**  
37 CANNING PLACE, LIVERPOOL.

## ANDREWS' FILTERS

No. 1, 12/6. FOR THICK LIQUIDS. No. 2, 18/6.



Used Extensively by Manufacturing Chemists and Druggists.

Sent Carriage Paid on receipt of Postal Order or Cheque for 12/6 or 18/6.

FILTERING CLOTHS OF EVERY DESCRIPTION.

**ANDREWS' FILTER CLOTH CO.,**  
330 High Holborn, LONDON, W.C.



A WONDERFUL SUCCESS!!

NON-INTOXICATING BEER  
Made from MASON'S Original

## EXTRACT of HERBS

(REGISTERED.)

Composed of Yarrow, Dandelion, Comfrey, & Horehound.  
ENLARGEMENT OF SIZE.

A Sixpenny Bottle makes EIGHT GALLONS of  
**HERB OR BOTANIC BEER**

A NON-INTOXICATING BEVERAGE

Full of Body and Flavour, with a Creamy Head like Bottled Ale, the most perfect substitute for Alcoholic Drinks ever discovered, for either Summer or Winter.

**BEWARE** of mean and fraudulent imitations.

**BEWARE** of others copying our title.

**MASON'S** is the original and only genuine.

**MASON'S** is a Special Compound entirely from Herbs.

NO OTHER EXTRACT MAKES BEER LIKE IT.

Sold in Bottles at 6d., 1/, & 2/ each, with directions.

## MASON'S WINE ESSENCES

Make Temperance Wines in a few minutes.

Ginger, Orange, Lemon, Raspberry, Black Currant, &c.  
These are having a very large sale now, and are extensively advertised.  
Sold in Bottles at 6d., 1s., and 2s. each.  
Quotations on application.

SOLE INVENTORS & MANUFACTURERS: **NEWBALL & MASON,**  
Manufacturing Chemists and Botanic Druggists, NOTTINGHAM.



# A GOOD LINE FOR CHEMISTS.

The Proprietor will forward, carriage paid, on receipt of Postal Order, 4s., 1 dozen 6d. bottles of this Popular preparation for making

## HERB BEER,

together with One Thousand Pictorial Handbills printed in colours on fine tinted paper, being a series of 16 copper-plate



views of scenes from the famous "Dukeries" of North Notts. These Handbills are a high-class example of the printer's art, and are retained by the public for the beauty of the pictures, and thus cause a demand for the preparation wherever introduced. This exceptionally favourable offer can only hold good until 31 May, 1889.

The Proprietor is induced to make this offer that the preparation may become more widely known in parts where it has not yet been introduced, his experience showing that where once known and used a large demand has been created and maintained. Chemists who are alive to the requirements of the times will see that it is greatly to their advantage to keep this well-known Extract, rather than be at the trouble and expense of putting up a preparation themselves. Customers' names printed on the handbills. Specially favourable terms for larger quantities may be obtained from the Proprietor,

**MANSFIELD, NOTTS.**



LONDON OFFICE:  
3 NEW LONDON STREET, LONDON, E.C.

Branch Establishment:  
15 PRINCE OF WALES' ROAD, NORWICH.

ST. GEORGE'S AND BANK PLAIN,  
NORWICH.

## TO THE CHEMISTS OF THE UNITED KINGDOM.

GENTLEMEN,—We beg respectfully to inform you that we have brought out a **LIEBIG'S EXTRACT OF MEAT AND MALT WINE** made with a **HIGH-CLASS BRITISH WINE**, which can be sold with a Sweets Licence, which costs only £1 5s., and can be obtained in **SCOTLAND** and **IRELAND** without a Magistrates' Certificate; in England this Certificate is required, but as you will see by the following Extract from a letter received January 17, 1889, from the Inland Revenue Authorities, it is not necessary to wait till the Licensing Sessions to obtain the Licence, but that the Board will, on production of a recommendation of two of the Licensing Magistrates in the district where the Trader resides, be prepared to grant permission for the immediate sale of the Wine.

### EXTRACT FROM LETTER:

"I am directed by the Board of Inland Revenue to acknowledge the receipt of your letter of 11th inst., and to state, in reply, that in cases where a person is desirous of selling Wine not to be consumed on the premises, although the Magistrates' Certificate has not been obtained, the Board would be prepared to consider favourably an application from the Trader to be allowed to sell, pending the next Meeting of the Licensing Magistrates, upon his depositing with the Collector the amount of Licence due, and producing a recommendation in writing from two of the Licensing Magistrates."

We offer to pay the entire cost of the Licence where it is not held if an order is sent us for 4 dozen of the 2/9 size, or 2 dozen 2/9 and 1 dozen 4/6; this we will forward carriage paid to any Railway Station in Great Britain.

Over Two Thousand Testimonials have been received from Medical Men, and the Wine has now an immense sale throughout the United Kingdom.

Soliciting your commands, we are, dear Sirs, Yours most obediently,

**COLEMAN & CO., LIM.**

P.S.—Please note that no Magistrates' Certificate is required for Scotland and Ireland, and for England permission can be obtained for the immediate sale of the Wine with very little trouble and no expense to you, as we offer to pay the entire cost of the Certificate.



## DESIRABLE &amp; PROFITABLE AGENCY FOR CHEMISTS.



# SPRING BLOSSOM CEYLON TEA

Packed in three qualities, and sent out in cases containing 40 lbs. each, to hold one size only, either 1 lb.,  $\frac{1}{2}$  lb., or  $\frac{1}{4}$  lb. Air-Tight Tin Canisters and Lead Packets, to sell retail at 2s., 2s. 6d., and 3s. per lb.

Quarter Pound Samples on receipt of Stamps.

Terms—Cash, less discount of 3d. in the £, carriage paid.

Our Fortnightly Price Current post free on application.

## CAVE, JOHNSON & CO.

WHOLESALE TEA AND COFFEE DEALERS,

8 LIME ST., LONDON, E.C.

BANKERS—WILLIAMS, DEACON & CO.



TRADE MARK.

## KANGRA VALLEY INDIAN TEA GROWERS' ASSOCIATION.

French & Langdale, 14 St. Dunstan's Hill, London, E.C.

Guaranteed to be Absolutely Pure, as supplied to Europeans in India

Packed in 1-lb.,  $\frac{1}{2}$ -lb., and  $\frac{1}{4}$ -lb. Tinfoil-lined Packets.

No. 1, Orange Pekoe, at 4/ per lb. No. 2, Pekoe, at 3/ per lb. No. 3, Pekoe Souchong, at 2/6 per lb. No. 4, Souchong, at 2/ per lb.

Export Prices in Bond, 6d. per lb. less than above, specially packed in 1-lb. air-tight lead packets, in chests of 40 or 80 lbs. Wholesale Discount on Nos. 1, 2, and 3, 17½ per cent.; on No. 4, 12½ per cent. 50 lbs. Carriage Paid. No Travellers employed. Tasting Samples on application.

These Teas are recommended to Chemists not only on account of their Purity, but because they are Less Astringent than other Indian Teas.

## NESTLE'S MILK FOOD FOR INFANTS.

ALSO WELL ADAPTED FOR CHILDREN AND INVALIDS.

Prepared at VEVEY, SWITZERLAND.



The only Perfect Supplement and Substitute for  
Mother's Milk.

Easy of Preparation—requires merely the addition  
of water.

UNIVERSALLY RECOMMENDED BY PHYSICIANS.



# Watson's No. 30.

The largest sale.  
The best profit.  
The greatest satisfaction.

“WATSON'S No. 30”—(Registered Trade Mark.)

Is the best Two Shilling Tea in the Kingdom.

“WATSON'S No. 30”—(Registered Trade Mark.)

Is distinctive and unique among blends.

“WATSON'S No. 30”—(Registered Trade Mark.)

Is not a pretty-looking “flat-catcher,” but a grand liquoring tea of sterling worth, that makes trade and keeps trade.

“WATSON'S No. 30”—(Registered Trade Mark.)

Once used is always used; nothing can replace it.

“WATSON'S No. 30”—(Registered Trade Mark.)

Is always the same.

“WATSON'S No. 30”—(Registered Trade Mark.)

Is the perfected product of the experience of a lifetime, and an infinite capacity for taking pains.

“WATSON'S No. 30”—(Registered Trade Mark.)

Is the despair of imitators.

“WATSON'S No. 30”—(Registered Trade Mark.)

Is the Tea of the Present and of the Future, and those who are first in the field with it will secure the best of the trade.

NET  
CASH  
PRICE

1/6

DUTY  
PAID,  
CARRIAGE  
PAID.

BECAUSE we have made it our chief pursuit and have striven early and late to bring it to perfection, **Watson's No. 30** now commands a larger sale, wherever introduced, than any other 2/- Tea. It is a big success, and we are proud of it. For our reputation's sake you may depend that we shall keep the quality up. We want every Tea-seller in the kingdom to sample it and thoroughly test, and then if they cannot beat it, we want them to assist us in still further increasing its sale.

Write for Price Lists and Samples of the following numbers:—

					NET CASH PRICE.		
No.	Description	..	..	..			
No. 0.	A Semi-Leaf Tea, sweet and clean	..	..	..	10d.	Duty Paid.	All Carriage Paid.
No. 7.	A Whole-Leaf Tea, strong and useful	..	..	..	1/-	"	
No. 10.	A Really Good Tea	..	..	..	1/1	"	
No. 20.	A Tea of Sterling quality	..	..	..	1/3	"	
No. 30a.	An Extra Rough Tea, for hard water	..	..	..	1/6	"	
No. 40.	An Exquisite Ceylon-flavoured Tea	..	..	..	1/9	"	
No. 50.	A Tea of Magnificent Quality	..	..	..	2/-	"	

## CERLON BLENDS.

					NET CASH PRICE.		All Carriage Paid.
X	Ceylon, blended with other British growths	...	...	...	1/3	Duty Paid.	
XX	Fine Ceylon Tea, incomparable value	...	...	...	1/6	"	
XXX	Pure Ceylon Tea, selected from the most noted gardens				1/9	"	

Ceylons packed in Lead or Metallic Packets with Customer's Name, Address and Mark printed on attractive Labels in the latest style, with golden letters. The extra charge will be one penny per lb.

**J. WATSON & Co.,** Tea Blenders TO THE TRADE ONLY,  
14, Jewry Street, London, E.C.

ALL ORDERS DESPATCHED SAME DAY AS RECEIVED.

Telegraphic Address:—"INTACT, LONDON."

Bankers:—UNION BANK OF LONDON

J. W. & Co. have no Shops, and no Retail Trade whatever.



## TO THE CHEMISTS AND DRUGGISTS OF GREAT BRITAIN.

We have much pleasure in drawing your attention to the extract from a letter received from the Assistant Secretary, Inland Revenue, Somerset House, dated January 17, 1889, which is as follows:—

"I am directed by the Board of Inland Revenue to acknowledge the receipt of your letter of 11th instant, and to state, in reply, that in cases where a person is desirous of selling Wine not to be consumed on the premises, although the Magistrates' Certificate has not been obtained, the Board would be prepared to consider favourably, an application from the trader to be allowed to sell, pending the next meeting of the Licensing Magistrates, upon his depositing with the Collector the amount of Licence Duty, and producing a recommendation in writing from two of the Licensing Magistrates."

You will see by the above that there is no difficulty in obtaining a licence for the sale of our Wines. We are willing, where the licence is not held, to pay the entire cost of the Retail Wine Licence, if an assorted order of 6 dozen is sent for any of our preparations. Our "LIEBIG'S EXTRACT OF MEAT AND MALT WINE" commands a very large sale, and is recommended by over 1,000 medical men, who have sent testimonials.

PRICES AND TERMS ON APPLICATION TO

**COLEMAN & CO., LIMITED,**  
NORWICH, and 3 New London Street, LONDON, E.C.

To H.R.H. The Prince of Wales, The Empress of Germany, &c.

**BRAND & CO.'S**  
**PEPTONES**  
OF  
**BEEF,**  
**MUTTON,**  
**VEAL,**  
AND  
**CHICKEN.**

**BRAND & CO'S.**  
**SPECIALTIES FOR INVALIDS.**  
CONCENTRATED  
BEEF TEA, VEAL,  
MUTTON & CHICKEN BROTHS;  
TURTLE SOUP & JELLY, CALF'S FOOT,  
JELLY, MEAT LOZENGES  
SOLE ADDRESS,  
11 LITTLE STANHOPE STREET, MAYFAIR, W.  
ESSENCES  
OF BEEF &  
MUTTON  
VEAL  
AND  
CHICKEN

*Fry's Pure*  
**Cocoa**



To secure this article  
ask for  
**FRY'S PURE**  
**CONCENTRATED**



# TOWER TEA.

## A MOST VALUABLE AGENCY.

**TOWER TEA.**—Only the choicest kinds, selected from the London import market, are used. Absolute reliance can be placed on its perfect purity and uniform high quality.

**TOWER TEA.**—Used by thrifty housekeepers; sold by enterprising agents in every town in the United Kingdom, who find it a profitable Agency.

REGISTERED.



*Tower Tea*

**NOTE.** THE ABOVE TRADE MARKS APPEAR ON EVERY PACKAGE.

**TOWER TEA.**—HUNDREDS OF TESTIMONIALS from all parts of the kingdom speak to the excellent character of this Tea, its popularity with all classes, and the high value of the Agency. A representative selection of these testimonials has been published, and can be had on application, with samples of undermentioned Teas; also the little pamphlet, "A Short History of Tower Tea"; and the book of pictures, "Voyage and Adventures of Ah Chin-Chin" (1s.).

<b>TOWER TEA, 1s. 4d. per lb. (retail price)</b>	Sound Wholesome Tea.
<b>TOWER TEA, 1s. 8d.        "        "</b>	Powerful Tea, whole and semi-leaf.
<b>TOWER TEA, 2s.            "        "</b>	Fine First Crop Tea, from India, China, and Ceylon.

WHERE VACANCIES MAY EXIST, AGENTS ARE APPOINTED BY

**THE GREAT TOWER STREET TEA CO., LD.**  
**3 JEWRY STREET, LONDON, E.C.**





## ROBINSON'S LIEBIG'S BEEF WINE.

Composed of Liebig's Company's Extract of Beef, Extract of Malt, and sound Port Wine.

### REPORT ON BEEF WINES.

From the results of my Analyses of various Beef Wines I have had occasion to examine, none have equalled as regards strength, purity of ingredients, and (of no less importance) the skilful and judicious manner in which the respective ingredients have been proportioned and combined, the Liebig's Beef Wine manufactured by Mr. B. ROBINSON, of Pendleton, Manchester.

It is in every sense a reliable preparation, embodying in a pleasing and palatable form all the acknowledged medicinal and nutritive properties pertaining to Liebig's Extract of Meat, Extract of Malt, and sound Port Wine.

WILLIAM ELBORNE, F.C.S., F.L.S.,

Lecturer on Materia Medica in the Owens College, Manchester (Victoria University).  
December 15, 1888.

Dear Sir,—I am in receipt of the samples of Meat Wine you sent to me. I was so pleased with the results obtained from it that I have obtained a further supply, and have given it a rather extensive trial. I have found it invaluable as a medicine in the treatment of Enteric and Scarlet Fever sufferers from these diseases rapidly improving in strength and weight under its influence. I think the combination a very happy one.

To B. ROBINSON, Esq.

I am, dear Sir, faithfully yours,

JOHN MULLEN, Resident Medical Officer.

PREPARED ONLY BY

**BENJAMIN ROBINSON, THE LABORATORY, PENDLETON, MANCHESTER.**

N.B.—A Sample Bottle sent FREE on receipt of Professional or Business Card.

## MILLAR'S BRITISH WINES.

ORANGE (suitable for Quinine), GINGER, RAISIN, COWSLIP, CHERRY, &c.

**A. MILLAR & CO., Thomas Street, DUBLIN.**

Sole Agents for London and District—H. J. ROYDANT & CO., 75 Acre Lane, Brixton, S.W.

# MILK IN POWDER

PREPARED BY THE SWISS MILK CO., ST. GALL, SWITZERLAND.

UNSWEETENED OR SWEETENED.

The cheapest, purest, and most nutritious of all similar productions.

*The Lancet* says:—A very interesting and valuable preparation.

*British Medical* says:—The preparation represents the highest possible degree of concentration which can be obtained, and is sure to be appreciated.

*The Medical Press* says:—A milk which is with difficulty distinguished from fresh cow's milk.

London Office, 61 Mark Lane, E.C.

# TOBACCO

## CIGARS & CIGARETTES.

**M. & R. PEACOCK,**

Tobacco, Cigar, & Cigarette  
Manufacturers,

KINGSLAND ROAD, LONDON, E.

Special Packed Tobaccos

**"ROYAL CHARTER"**

AND

**"UPPER CRUST."**

Sold in Packets only.

Those who deal in these Goods, or intend doing so  
should write to the above Manufacturers for  
Price List.





ARTHUR HILL HASSALL, M.D., LOND.,

Author of "Food: Its Adulteration and Methods for their Detection."

EDWY. GODWIN CLAYTON, F.I.C., F.C.S.

Chemical Laboratory, 54 Holborn Viaduct, London, says:—

We have analysed a sample of the "Liebig's Extract of Meat and Malt Wine" manufactured and supplied by Messrs. Hassall & Co., and have found this preparation to contain considerable proportions of the valuable and characteristic constituents of Extract of Meat, in combination with Port of good quality and Extract of Malt. The amount of combined phosphoric acid present is large, and the results of the analysis in general have been of a very satisfactory character. This article possesses an agreeable vinous flavour, and we are enabled from the results of our analysis to pronounce it a valuable and very good preparation of Meat Extract, Wine, and Malt.

Sold Retail, in Bottles at 2/9 and 4/6 each.

Cost of Retail Wine Licence will be allowed on a 6-dozen order.

Supplied in bulk at greatly reduced prices.

Special arrangements made to supply the Wine in Bottle, with attractive Labels, Circulars, and Hand-some Framed Show Cards, with Buyers' own name upon same, free of charge.

May be had prepared with choice Port (Oporto Wine), Sherry, Claret, or superior unfermented juice of the Grape (non-alcoholic), with or without Quinine, Pepsine, or Iron, as desired, at same prices.

This preparation proves its superiority over all others of a like kind, wherever it is introduced, and is becoming every day more prescribed by Medical gentlemen to take precedence as the most perfect form of concentrated nourishment.

We will send a sample, carriage paid, to any address on application, as we feel sure no idea can be formed as to what degree of perfection has been attained until this preparation is tried.

List of Testimonials, copy of Analyst's Reports, and Trade Prices on application.

HASSALL & CO., 7 ST. ANN'S STREET, MANCHESTER,

AND

BARCLAY & SONS, LIMITED, LONDON.

EIGHT PRIZE MEDALS AWARDED

## GOODALL'S HOUSEHOLD SPECIALITIES.

### YORKSHIRE RELISH.

Most Delicious Sauce in the World. Bottles, 6d., 1s., and 2s. each

### GOODALL'S BAKING POWDER.

The Best in the World. 1d. Packets; 6d., 1s., 2s. and 5s. Tins.

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One 6d. Tin is equal to 25 eggs. In 1d. Packets; 6d., 1s., and 5s. Tins.

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Best Tonic yet Introduced. Bottles, 6d., 1s. and 2s. each.

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Makes the Best Ginger-Beer. Packets, 3d. and 6d.

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For Painting Stoves, Grates, Iron, Tin, &c. 6d. and 1s. Bottles

### GOODALL'S LAVENDER WATER.

A Rich and Lasting Perfume. Bottles, 1s., 2s., and 5s. each.

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### GOODALL'S JELLY SQUARES.

Make a Delicious and Nutritious Jelly. In ½- and 1-pint boxes, 3d. and 6d. each.

PROPRIETORS—GOODALL, BACKHOUSE & CO., LEEDS

### PATENT MEDICINES

AND

## DRUGGISTS' SUNDRIES.

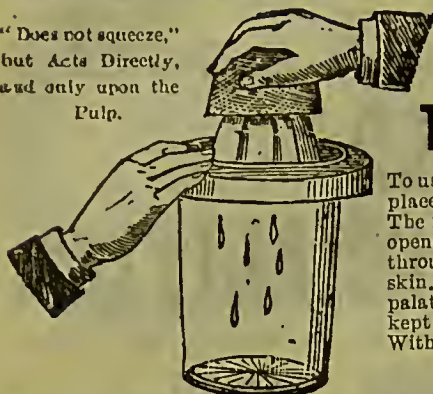
Monthly Price List of Patent Medicines, Druggists' Sundries, &c., will be sent post free on application to

GOODALL, BACKHOUSE & CO., LEEDS.



## THE WORLD'S BEST LEMON SQUEEZER AT 1/-

"Does not squeeze,"  
but Acts Directly,  
and only upon the  
Pulp.



*This Lemon Squeezer is to the o'd-fashioned article what the  
Railway Carriage is to the Stage Coach.*

## THE "MODERN" LEMON SQUEEZER.

To use it, set the squeezer upon a tumbler, as shown by the accompanying illustration, place a half lemon upon the points, press downward, and rotate the lemon slightly. The ribs easily enter the pulp, the juice as it is liberated passes down through the openings into the tumbler; these openings are too small to allow the seeds to pass through. By this process the clear juice from the pulp is obtained free from admixture with the bitter oil of the skin. The juice thus procured is doubtless a most wholesome beverage, and is certainly very agreeable to the palate. Once tried this squeezer will supplant all old-fashioned appliances. Being made of glass, it is as easily kept clean as a tumbler. This squeezer can be used by a child, without soiling the hands, it is so easily managed. With this new appliance none of the juice is lost, therefore its superiority to old types of squeezers will be obvious.



WHOLESALE PRICE ON APPLICATION TO

**B. & E. M'HUGH & CO., BELFAST, IRELAND.**

Patents taken out for India, Canada, Victoria, Australia, Queensland, New Zealand Cape Good Hope; also Austria, Belgium, France, Germany, Italy, Norway, & Spain.

# "MAY-ROBERTS" WATER BATH,

REGISTERED.



This Water Bath will supply a long-felt want amongst Chemists and Perfumers, where small quantities of materials have to be dealt with.

The old form of Water Bath necessitates the use of a second vessel for pouring the melted Pomade, Cream, or other substance into the bottles or jars in which they are sold. In the "MAY-ROBERTS" Water Bath the earthenware bowl can be lifted out of the tin containing the boiling water, the process of cooling being thereby very much expedited, and the contents can be poured into the bottles or jars direct from the bowl. The Bath is also supplied with an earthenware cover.

1 PINT.	5 PINT.	10 PINT.
Each 3/0 .. ..	5/6 .. ..	9/6

**MAY, ROBERTS & CO.**

9 CLERKENWELL ROAD, LONDON, E.C.

Telegraphic Address—"FEEDING BOTTLES LONDON."

THE NEW FOOD WARMER. SIMPLE, SAFE, AND CHEAP.

# BLACKBOURN'S INFANT'S FOOD WARMER

# 1/6

Complete, or with Special  
Earthenware Food Pan,

**1/9.**



# 1/6

Complete, or with Special  
Earthenware Food Pan,

**1/9.**

Protected under Patent No. 6991.

REQUIRING ORDINARY NIGHT LIGHT ONLY.  
SPECIAL NOTICE TO THE TRADE.

Since the above Food Warmer was first introduced the following improvements have been added, for which provision was made in Patent Specification:—

- 1.—A strong RIM has been added to the cylinder, thus strengthening the gauze, and also preventing the Pan from being upset.
- 2.—The Food Pan now has affixed to it a small cup-shaped Handle in place of the former long one, thus making the article more compact.
- 3.—A highly-finished Food Warmer, with special EARTHENWARE Pan (in place of Tinware), is now supplied to retail at 1/9 complete.
- 4.—Earthenware Pans can be supplied separately, to retail at 6d. each.

ENQUIRE OF WHOLESALE SUNDRY HOUSES, OR THE PATENTEE,

**HENRY DUNSFORD, 84 Duke Street, LIVERPOOL.**



# Clarke's Newly Designed "Pyramid" Nursery Lamp Food Warmer, with New Registered Panakin.



N.B.—NO ALTERATION IN THE PRICE OF THE OLD PATTERN "PYRAMID" FOOD WARMER.

## CLARKE'S IMPROVED PANAKINS (REGISTERED) FOR USE WITH CLARKE'S "PYRAMID" NURSERY LAMP.

By this invention any liquid food can be poured out, or drunk, without scum or grease passing through the spout, and preventing when poured into a Feeding Bottle, so objectionable with all other Panakins. These Panakins will fit all the old "Pyramid" Nursery Lamps, and can be purchased separately.

WHOLESALE PRICES { No. 1 ... 30/ per dozen. } Cash discount, 5 per cent.  
LAMPS COMPLETE { " 2 ... 33/ " }  
" 3 ... 36/ "

N.B.—Extras—Porcelain Panakins per dozen, No. 1 ... 8/ ... Lids ... 2/  
" " " " 12 ... 9/ ... " ... 3/  
" " " " 3 ... 10/ ... " ... 4/

Tin Panakins, No. 1, 8/ ... No. 2, 10/ ... No. 3, 12/

Bar Glasses [4/ ... Roughed, 6/ ... Opaline, 6/ ... Coloured, 6/ ... Ruby, 8/

—Ask for CLARKE'S PANAKIN, and see that his name and the registered number

(Registered 91,241) is on the Panakin, and trade mark "PYRAMID."

Clarke's Patent "PYRAMID" NIGHT LIGHTS are the only Lights suitable for these Lamps.

Old Retail by all respectable dealers, and Wholesale by the Patentee, S. CLARKE,

"PYRAMID" AND "FAIRY" LIGHT WORKS, CRICKLEWOOD, LONDON, N.W.

on Show Room—31 ELY PLACE, HOLBORN CIRCUS, E.C.

## CLARKE'S ADJUSTABLE BED-TRAY (COUSINS') (PATENT)

FOR INFANTS AND INVALIDS,

For use with CLARKE'S "PYRAMID" NURSERY LAMP FOOD WARMER, with his NEW REGISTERED PANAKIN.

This is an invaluable Invention, and useful appliance at the BEDSIDE, suitable for Invalids, particularly for Parents whose Infants require Feeding during the night. It obviates necessity of getting out of bed, as everything required for use can be put on the TRAY. The is adapted for use in connection with Clarke's "Pyramid" Food Warmer, and when required can be turned to the wall in such a manner as to Shade the Person in bed from the Rays of the Light.

Invalids will find it a Great Comfort, for any book, plate, basin, &c., can be placed thereon for use, and obtained without altering the position in bed. By means of a Slide, the Tray is pulled forward to the position or length required. It is Highly recommended by Medical Profession, and can be obtained from most dealers in Clarke's "Pyramid" "Fairy" Lamps.

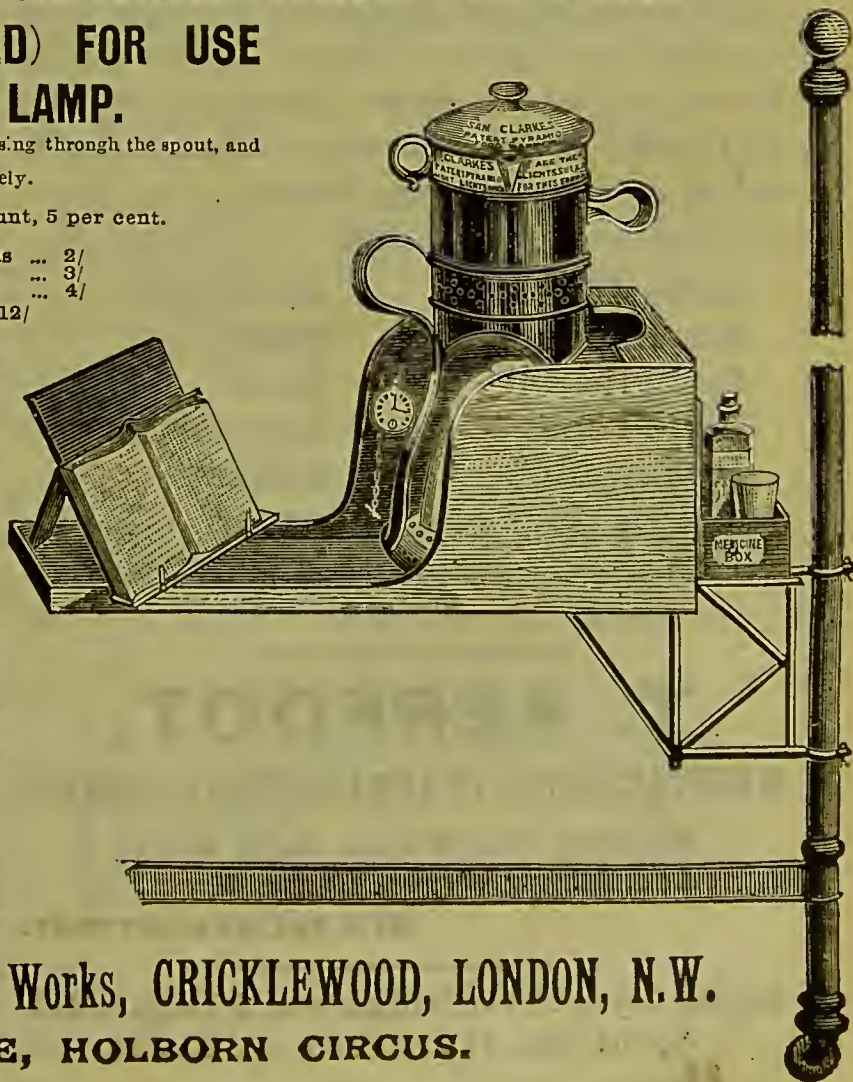
Price, 15/, with Book Rest & Medicine Box, 21/, less 33½ per cent. Food Warmer, see above.

With Brass Bracket, 4s. extra. Adjustable Brass Support for book rest, 5s. extra

INSTRUCTIONS FOR FIXING.—Place the Clips round the bed-post, insert the Thumb-screw in the square hole at the end of same, and screw as tightly as possible. The Clips being of spring steel, they will fit any size post. A little cloth or wash-leather should be placed round the bed-post to prevent scratching the post.

CLARKE, "Pyramid" and "Fairy" Light Works, CRICKLEWOOD, LONDON, N.W.

SHOW ROOMS—31 ELY PLACE, HOLBORN CIRCUS.





# KERFOOT'S PEARL CACHOUS.

THESE beautiful little lozenges, perfectly spherical in form, weighing about 400 to the ounce, of exquisite flavour and great strength, are the most popular and perfect breath lozenges ever introduced; unlike the ordinary flat lozenges, these little PEARLS have no angles to attract dust and become soiled with a slight handling, consequently they can be carried in the purse or pocket, and are altogether more portable than ordinary lozenges.

The unique appearance and flavour of this novelty quickly ensured a large sale, and its success, as might have been anticipated, quickly brought to the front some worthless imitations, the sale of which can only result in disappointment to all concerned.

## KERFOOT'S Pearl Cachous

are the only genuine PEARL CACHOUS: they are not only better looking, but are double the strength of the imitations, and buyers are therefore requested to order the original, and thus ensure a perfect article. They are elegantly put up in attractive one-pound bottles, and are an ornament to any Pharmacy. The following flavours are always in stock—

Clove Pink.	Lavender.
Ess. Bouquet.	Musk.
Frangipanni.	Rose.
Heliotrope.	Rondeletia.
Jockey Club.	Violet.

Price 2s. 9d. per lb. in 1-lb. bottles.

*Eight bottles sent carriage free to any part of the Kingdom.*

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MANUFACTURING PHARMACEUTICAL CHEMIST,  
Medlock Vale Works, Berry Street,  
And Albion Works, Hague Street,  
**MANCHESTER.**

London Depot, St. Paul's Chambers, 19 Ludgate Hill.  
Agent Mr. HENRY C. QUELCH.

# WONDERFUL, BUT TRUE! SPLENDID PROFITS.

6-oz. Bottles of LIME CREAM COMBINATIONS,  
to retail at 6d., paying half profit

**CAMPHOR AND ROSEMARY LIME CREAM**, speciality for spring and summer. Cooling, cleansing, and refreshing.

**LIMETTA AND COLOGNE LIME CREAM**, for all seasons; most exhilarating after a hard day's work; increases the hair's growth.

**BAY RHUM AND PINE LIME CREAM**, will please the most fastidious; pure aromatic perfume; greatly admired.

**EUCALYPTUS LIME CREAM**, a novelty; certain to take, and to be always re-demanded.

**SANITARY LIME CREAM**, for nursery; kills nits and all living parasites infesting the hair; perfectly innocent.

All the above are elegant, snow-white, creamy, and inseparable preparations, which sell at sight. Quite easily and quickly made, no heat required, keep indefinitely. Recipes with directions 7d. each, 3 for 1s. 6d., free.

### SPECIAL OFFER.

Send 5s., postal order or stamps, and I will remit free a sample bottle of any, with recipes for all, together with 100 assorted labels, and formula for making an enamel Capping Wax (costing 6d. per lb.), much more elegant and quarter price of paper or leather. This chance should not be missed.

Detailed List of 400 valuable recipes as sold by me these last 10 years, post free.

### "THE ILLS OF LIFE."

"TOOTHACHE," "CORNS," & "WHOOPIING COUGH."

WARRANTED CURES FOR THE ABOVE.

These preparations are thoroughly practicable. Pay well, are easily made, and may be sold with confidence. Recipes, 7d. each; 3 for 1s. 6d., with full directions, post free.

**T. BROOKS, Chemist, HORNSEY, N.**

## CORN PLASTERS.

For excellent finish and carefully selected White Felt our Plasters will be found equal to the best produced; in adhesiveness and flexibility they surpass all other makes. We make them antiseptic, which is a very valuable and desirable quality.

In glass-top boxes, containing 144 Plasters. Thin 1/8, Thick 2/4 per box.

THIN (in boxes containing 12 Plasters)	..	..	2/3 per dozen boxes.
THICK "	"	"	4/6 "
THICK "	"	"	2/10 "
THICK "	"	"	5/8 "
Smaller Corn Plasters (12 in a box).	Thin 2/3, Thick 2/10 dozen.	"	Plain or Arnicated.

### KID CORN PLASTERS.

Round or oval (12 in a box), 2/3 per dozen boxes. Subject to Discount.

Manufactured by

[5]

**SEABURY & JOHNSON,**

46 JEWIN STREET, LONDON, E.C.

NEW YORK. MONTREAL. HAMBURG.

## LETHE.

GENTLEMEN,—We desire to call your attention to the fact that we are advertising a Specific for Neuralgia called "LETHE," and will be happy to forward you a sample for gratuitous distribution on receipt of card with address.

**LETHE.** Why is it a success?

1/1½.

Because it does what it professes. It is an absolute "Specific" for Neuralgia and pain of every description.

**LETHE.** Cures a larger proportion of cases than all the other remedies combined.

1/1½.

**LETHE.** Has been used in private practice for 20 years, and has an enviable reputation due to its marvellous results.

Yours truly,

**W. WRIGHT & CO., 22 Gray's Inn Rd., LONDON.**



# CHAS. SOUTHWELL & CO.

## "EXCELSIOR" TABLE JELLIES

IN CARDBOARD BOXES



Flavours—Orange, Lemon, Calves' Feet, Vanilla, Raspberry, and Noyeau.  
HALF-PINTS, 1/9 per doz.; PINTS, 3/3 per doz.; QUARTS, 6/- per doz.

WHOLESALE AND EXPORT MANUFACTURERS OF  
JAMS, JELLIES, MARMALADES, CANDIED  
PEELS, BOTTLED FRUITS.

DRIED ORANGE-PEEL FOR DRUGGISTS.

The "EXCELSIOR" JELLIES can be obtained from F. NEWBERRY & SONS,  
1 & 3 King Edward St., E.C.; JOHN SANGER & SONS, 48 Oxford St., W.; and  
Messrs. BARCLAY & SONS, LIMITED, 95 Farringdon Street, E.C.; also direct  
from the Works,

DOCKHEAD, LONDON, S.E.

# TYRER'S

## SAUCES

AND

## "BOROUGH" KETCHUP

THE GIANT 1d. BOTTLE OF SAUCE.

LARGEST IN THE TRADE.  
In Half-Gross Boxes, at 6/6 per Gross.\*

"BOROUGH" KETCHUP, WORCESTER, HARVEY, YORKSHIRE  
OR READING SAUCE.

1d. Sample Bottles, dozen parcels ..	per gross 5/	extra quality 8/
1d. Giant Bottles, dozen parcels ..	" 5/8	" 8/
1d. Giant Bottles, dozen parcels ..	" 6/	" 8/
1d. Bottles (flat or round), reputed 1-pint ..	" 6/8	" 8/
1d. Bottles (flat or round), reputed pint ..	" 18/	" 24/
1-pint Imperial Round Stoppered Bottles ..	" 28/	" 32/
1-pint Imperial ..	" 30/	" 38/
12 1/2-gallon Casks (casks free) ..	" 50/	" 80/
12 1/2-gallon Casks (casks free) ..	each 20/	" 32/

## ROYAL CAFÉ SAUCE.

In 8-oz. square-stoppered bottles, 48/ per gross.  
A rich, fruity Sauce of fine flavour, and worth especial atten-  
tion, as being the most saleable in the market.

Samples of any kind Sent Free of all Cost by

PETER TYRER,  
The "Borough" Ketchup and Sauce Maker,  
70 LONG LANE, BOROUGH, LONDON, S.E.

SCOTCH AGENCY: 113 WEST NILE STREET, GLASGOW.  
Also Sold by W. & C. PANTIN, Upper Thames Street, LONDON, E.C.  
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JOS. TRAVERS & SONS, 119 Cannon Street, London, E.C.

# BATGER & CO., LONDON,

SOLE MAKERS OF THE

## NONPAREIL TABLE JELLY

AND

## NONPAREIL BLANC MANGE

IN CARDBOARD BOXES.

Acknowledged to be the best Concentrated Jelly and Blanc Mange in the Market.

FLAVOURS—

Lemon, Orange, Calf's Foot, Vanilla, Raspberry, Strawberry, Noyeau, Black Currant, and Pine Apple.

Half pints, 1/9 per doz.; pints, 3/3 per dozen; quarts, 6/- per dozen.

CORNS.



WARTS.

## ROBINSON'S.

THE OLDEST AND MOST SUCCESSFUL.

doz. mounted on a handsome Illustrated Show Card, Retail, 6d. each; Wholesale, 3s. 6d. per doz. It is especially adapted for Export Trade, and  
may be safely sent to the hottest climates, as each glass tube is hermetically sealed and enclosed in a cardboard case, with full directions for use.  
N.B.—The above is exempt from Stamp Duty by permission of the Board of Inland Revenue. Wholesale by all the Patent Medicine Houses, or from

B. ROBINSON, Manufacturing Chemist and Distiller, PENDLETON, MANCHESTER.

# "RAMORNIE." LIEBIG'S Extract of Meat.

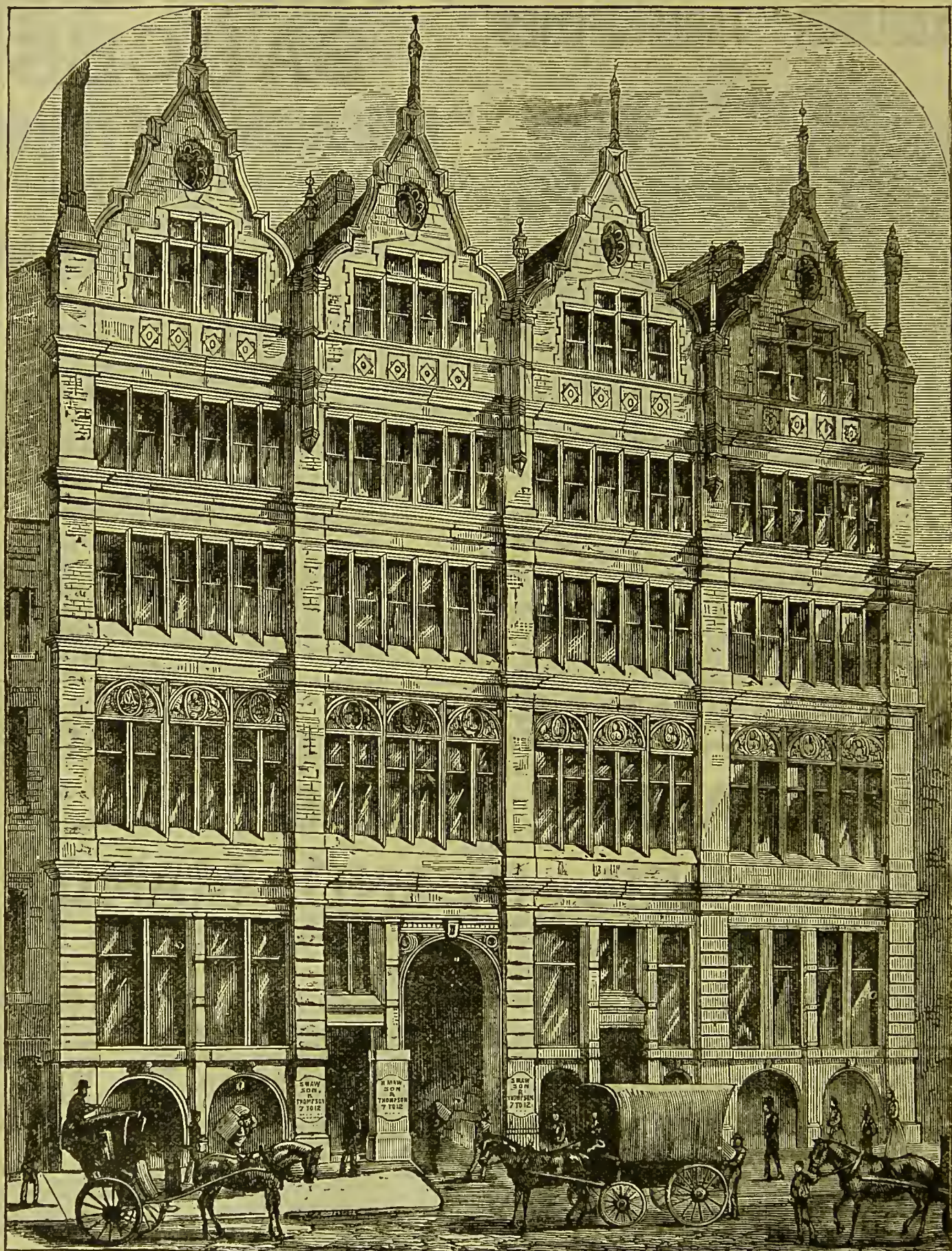
As supplied to the War Office.

1-lb. Jars.....per lb.	8/2	.....per doz.	74/0	2-oz. Jars.....per lb.	7/0	.....per doz.	10/8
1-lb. Jars....."	6/4	....."	38/0	1-oz. Jars....."	7/8	....."	5/9
4-oz. Jars....."	6/7	....."	19/9	1-oz. Jars....."	8/0	....."	8/0

Write for Detailed Price List to the Australian Meat Co and 11 Fenchurch Avenue, E.C.

6 lbs. Carriage Free.





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7 to 12 ALDERSGATE STREET, LONDON.



Telephone Number, 1852.

Telegraphic Address—CHEMICUS LONDON.

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Calcium Sulphide .. $\frac{1}{10}$ gr.	Ergotin. equal .. 3ss. Ext. 3 gr.	Morphine, Muriate .... $\frac{1}{2}$ gr.	Quinine, Bi-Sulphate .. $\frac{1}{2}$ gr.	Rhubarb Comp. B.P. ... 5 gr.
" " .. $\frac{1}{2}$ gr.	Euonymin ..... 2 gr.	" " " " .. $\frac{1}{2}$ gr.	" " " " .. $\frac{1}{2}$ gr.	Salicylic Acid ..... 2 gr.
" " .. $\frac{1}{2}$ gr.	Iodoform ..... 1 gr.	Opium, Powdered .... $\frac{1}{2}$ gr.	" " " " .. $\frac{1}{2}$ gr.	" " " " ..... 5 gr.
" " .. $\frac{1}{2}$ gr.	and Iron ..	Podophyllin ..... $\frac{1}{2}$ gr.	" " " " .. $\frac{1}{2}$ gr.	Strychnine " ..... $\frac{1}{2}$ gr.
Cannabis Indica Ext. $\frac{1}{2}$ gr.	Ipecac. Powdered .... $\frac{1}{2}$ gr.	" " " " .. $\frac{1}{2}$ gr.	" " " " .. $\frac{1}{2}$ gr.	Zinc. Phosphide ..... 1 gr.
" " " " .. $\frac{1}{2}$ gr.	Mercury Bin-Iodide .. $\frac{1}{2}$ gr.	" " " " .. $\frac{1}{2}$ gr.	" " " " .. $\frac{1}{2}$ gr.	" " " " ..... 1 gr.
Cascara Sagrada Ext. 3 gr.	" Proto-Iodide .. $\frac{1}{2}$ gr.	" " " " .. $\frac{1}{2}$ gr.	" " " " .. $\frac{1}{2}$ gr.	" " " " ..... 1 gr.

In this form the ingredients are not only perfectly preserved, but do not affect the teeth, or offend the palate, and, further, can be conveniently kept out of sight by those who object to be regarded as invalids. Complete list mailed free on application

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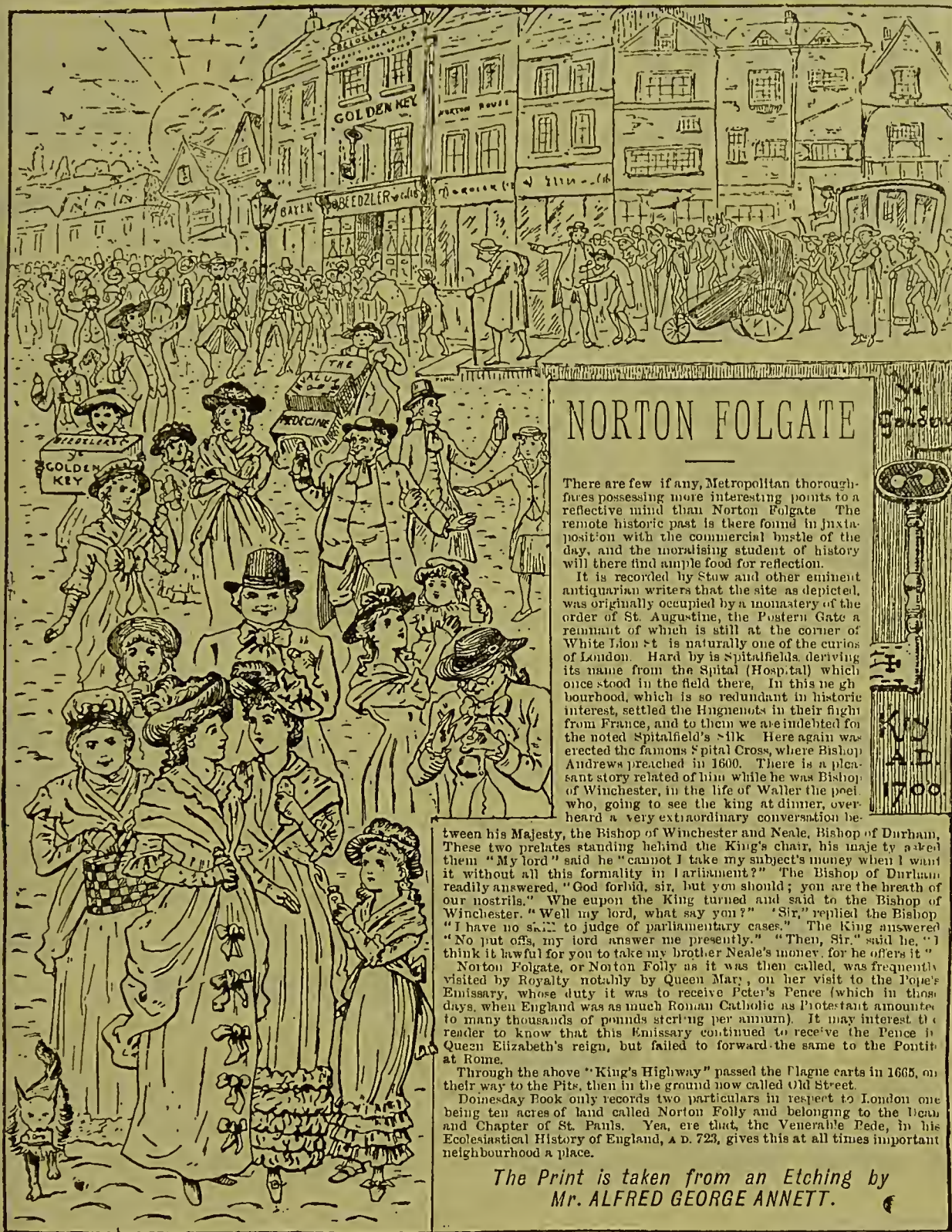
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(Each Teaspoonful contains 8 grains.)

Introduced by Curtis & Co.

See that this preparation bears our name.





## NORTON FOLGATE

There are few if any, Metropolitan thoroughfares possessing more interesting points to a reflective mind than Norton Folgate. The remote historic past is there found in juxtaposition with the commercial bustle of the day, and the moralising student of history will there find ample food for reflection.

It is recorded by Stow and other eminent antiquarian writers that the site as depicted, was originally occupied by a monastery of the order of St. Augustine, the Postern Gate a remnant of which is still at the corner of White Lion St. is naturally one of the curios of London. Hard by is Spitalfields deriving its name from the Spital (Hospital) which once stood in the field there. In this neighbourhood, which is so redundant in historic interest, settled the Huguenots in their flight from France, and to them we are indebted for the noted Spitalfields' silk. Here again was erected the famous Spital Cross, where Bishop Andrews preached in 1600. There is a pleasant story related of him while he was Bishop of Winchester, in the life of Waller the poet, who, going to see the king at dinner, overheard a very extraordinary conversation between his Majesty, the Bishop of Winchester and Neale, Bishop of Durham.

These two prelates standing behind the King's chair, his majesty asked them "My lord" said he "cannot I take my subject's money when I want it without all this formality in Parliament?" The Bishop of Durham readily answered, "God forbid, sir, but you should; you are the breath of our nostrils." Whereupon the King turned and said to the Bishop of Winchester, "Well my lord, what say you?" "Sir," replied the Bishop, "I have no skill to judge of parliamentary cases." The King answered "No put off, my lord answer me presently." "Then, Sir," said he, "I think it lawful for you to take my brother Neale's money, for he offers it."

Norton Folgate, or Norton Folly as it was then called, was frequently visited by Royalty notably by Queen Mary, on her visit to the Pope's Emissary, whose duty it was to receive Peter's Pence (which in those days, when England was as much Roman Catholic as Protestant amounted to many thousands of pounds sterling per annum). It may interest the reader to know that this Emissary continued to receive the Pence in Queen Elizabeth's reign, but failed to forward the same to the Pontiff at Rome.

Through the above "King's Highway" passed the Flagg carts in 1665, on their way to the Pits, then in the ground now called Old Street.

Domesday Book only records two particulars in respect to London one being ten acres of land called Norton Folly and belonging to the Dean and Chapter of St. Pauls. Yea, ere that, the Venerable Bede, in his Ecclesiastical History of England, A.D. 723, gives this at all times important neighbourhood a place.

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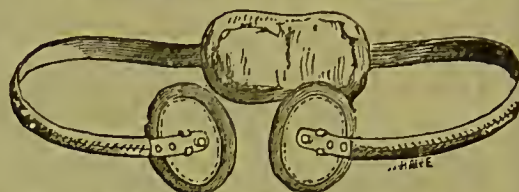
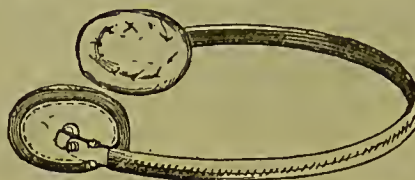
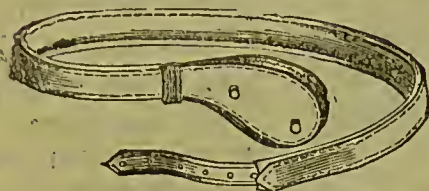




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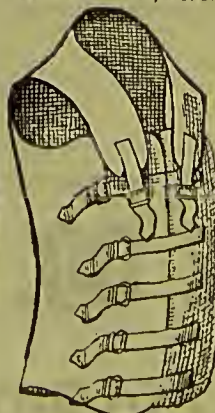
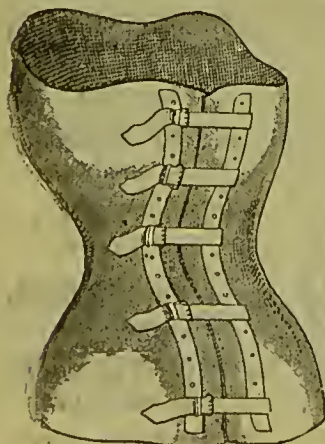
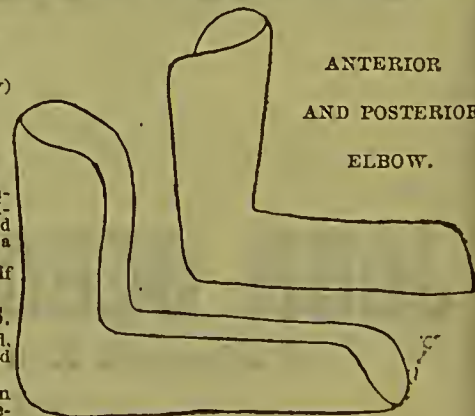
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**"Lanoline" Cold Cream.**—Exquisite for the toilet. This is emollient, protective and soothing. "Lanoline" supplies the skin with a "cream" natural to it, and is highly regarded for abrasions, chapped hands, roughness, hardness, &c. It does not leave the skin glossy.

Softens and Soothes.

**"Lanoline" Toilet Soap.**—*The natural skin soap.* "Lanoline" Toilet Soap is made with "Lanoline." "Lanoline" being the natural fat of the skin is held by many dermatologists to be the very best nutrient and preservative of this tissue, restoring its soft, pliable and elastic nature and healthy hue. It does not hurt the eyes or the most delicate skin.

**"Lanoline" Pomade.**—Hair anointed with this presents no shiny, greasy gloss, and does not stain or soil fabrics. "Lanoline" Pomade is quickly absorbed. It soon renders the hair smooth, silken, and strong, and after employing it a little time the scalp becomes perfectly healthy and free from dandruff. It is a natural hair tonic.

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See "CHEMIST AND DRUGGIST," December 15th. 1874.

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ESTABLISHED 1859

PRINCIPAL OFFICE, 42 CANNON STREET, LONDON, E.C.

BRANCH OFFICES:

MELBOURNE, SYDNEY, AND NEW YORK.

Published every Saturday.

Subscription 10s. per year, payable in advance; dating from the commencement of any month.

Supplied only to persons connected with the Trade.

Post free to every country in the world. Single copies 4d. each.

Cheques or Postal Orders should be payable to EDWARD HALSER, and crossed MARTIN & Co.

Supplied regularly to every member of the following Societies, who have adopted THE CHEMIST AND DRUGGIST as their official organ:—

The Pharmaceutical Society of New South Wales.

The Midland Pharmaceutical Association of New Zealand.

The Pharmaceutical Society of Queensland.

The Pharmaceutical Society of South Australia.

The Hobart Chemists' Association.

The Launceston Pharmaceutical Association.

South African Pharmaceutical Association.

For Australasian subscribers the subsidiary journal, THE CHEMIST AND DRUGGIST OF AUSTRALASIA, is included.

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WE have pleasure in announcing to Continental subscribers that henceforth, by arrangement with the post offices of the various countries, subscriptions to THE CHEMIST AND DRUGGIST can be paid at any post office in Austria-Hungary, Belgium, Denmark, Germany, Holland, Norway, Russia, and Sweden at our rates, namely 10s. per annum including postal delivery to subscribers in any of those countries. Subscriptions may date from the first issue of any month.

THE CHEMIST AND DRUGGIST OF AUSTRALASIA, published monthly at our Melbourne office, can be supplied to subscribers outside Australasia at 5s. per annum, payable in advance, and commencing at any date. Chemists interested in the drug trade and the pharmaceutical affairs of the Australasian Colonies will find a full record of all events affecting their occupation in *The Chemist and Druggist of Australasia*. Single copies can be supplied at 6d. each. Application should be made by English or American subscribers to the office at 42 Cannon Street, London.

THE CHEMISTS AND DRUGGISTS OF IRELAND have not yet succeeded in securing a friendly talk with the Pharmaceutical Council representatives regarding the forthcoming Pharmacy Bill— if we can speak of it as forthcoming. The conference, which we announced a fortnight ago as fixed for Thursday of last week, has not come off, because the Pharmaceutical Council declines to send representatives to Belfast, and the Belfast chemists and druggists are at present unable to go to Dublin.

Two prosecutions are reported under the Sale of Food and Drugs Act in reference to olive oil. A Wandsworth tradesman has been fined 10l. and costs for selling mineral oil instead of olive oil, and a chemist at Stone has had to pay 5l. and costs for selling as olive oil a mixture of that substance with 40 per cent. of cotton-seed oil.

AT Bedford and at Dublin questions in relation to analysts' certificates have arisen. At Bedford the corporation refused to pay their analyst for fourteen analyses, because in one case he had omitted to insert the weight of some coffee sent to him. He proposed to correct his certificate, but it was argued that such correction would not be admissible. The county court judge has not yet decided the question. At Dublin the Queen's Bench judges made short work of a case referred to them from Galway, where the magistrates had dismissed a summons because full evidence of the signature of the analyst was not forthcoming.

LIVERPOOL and London furnish fresh cases of carbolic acid poisoning. In the last-named instance the ginger-beer bottle figures again.

DEATHS from taking poison in mistake for medicine continue to occur. We have reports of cases in London, Glasgow, and Mansfield this week. The poison-bottle is still wanted.

A MEETING in reference to the proposed railway rates as they affect druggists is to be held at the Chamber of Commerce on Monday at 2 P.M., when the report of the committee which has been working on the subject will be submitted for discussion.

THE Society for the Protection of Animals from Vivisection are interesting themselves in the forthcoming election for the Pharmaceutical Council, because they suspect an intention to use the research laboratory for the promotion of the experiments which they aim to suppress. The fact that two noted advocates of vivisection experiments are on the Research Laboratory Committee justifies to some extent their suspicion, but their interference has not been very graciously received officially.

As there has always been a considerable amount of doubt regarding the proper specific gravity of sandal-wood oil, the letter from Messrs. Horner & Sons in this issue will be read with interest.

WE print a very important paper by Dr. Klein, F.R.S., on the disinfectant properties of iodate of calcium. He believes that there is a great future for this article.

LANOLIN is the subject of a practical paper by Mr. Helbing on page 572. He gives several useful formulæ.



## Metropolitan Reports.

**LONDON COMMERCIAL TRAVELLERS' BENEVOLENT SOCIETY.**—The first dinner of the London Commercial Travellers' Benevolent Society took place at the Holborn Restaurant last week. Mr. T. F. Blackwell (Messrs. Cross & Blackwell) presided, and the company numbered upwards of two hundred. Subscriptions to the amount of 1,393*l.* were announced.

**MINERAL OIL FOR OLIVE OIL.**—At Wandsworth Police Court on April 17 James Palmer, a grocer, of Oldridge Road, Clapham, was summoned for selling olive oil which was not of the substance and nature demanded. Mr. W. W. Young supported the summons, and produced the analyst's certificate showing that the oil was adulterated to the extent of 100 per cent. of mineral oil. Mr. Plowden said it was a bad offence, and imposed a penalty of 10*l.*, with costs.

**A SERIOUS FIRE** occurred in the City on Saturday last in Jewin Crescent. Among other damage done the premises of Messrs. Seabury & Johnson, manufacturing chemists, were somewhat injured. The front was scorched, some window-glass broken, the contents slightly damaged by smoke and water, and the front door was broken open. Messrs. Seabury & Johnson ask us to state that the injury done will not interfere with the execution of orders. Inside, the laboratory and women's workroom were the only departments damaged.

**CARBOLIC ACID IN THE GINGER-BEER BOTTLE.**—Rose Eleanor Yeates was the eight-year-old daughter of Henry Yeates, a police-constable, residing at 217 Mayall Road, Brixton. The father had procured some carbolic acid for the drains, and he put this in a ginger-beer bottle. After using some of it on Saturday last he placed the bottle on the wall. He had been absent but a few minutes, when he heard the child, who had been watching him, scream out. Upon going into the yard he found she had drunk a portion of the contents and thrown the bottle on the ground. Dr. Dunstan, of 99 Kellest Road, Brixton, was at once called in; but the child became unconscious, and died about half an hour after his arrival.

**MISTAKEN FOR MEDICINE.**—An inquest was held last week respecting the death of Francis Mason (38), an inspector in the service of the London, Chatham, and Dover Railway Company, who died on April 15, at Wandsworth Road station. Five weeks previously he had taken a table-spoonful of hydrochloric acid in mistake for cough mixture, both liquids having been kept in black wine-bottles. Mr. Felix da Costa, house surgeon at Charing Cross Hospital, deposed that the unfortunate man was admitted there on January 12 and discharged on February 19, practically cured. On April 1, however, he was readmitted with fresh complications, and died on April 15 from exhaustion, following starvation, and acute pneumonia, the result of hydrochloric-acid poisoning. The jury returned a verdict of death from misadventure.

## Provincial Reports.

*Items of news, and newspapers containing matters of interest to the trade, sent to the Editor, will much oblige.*

### BEDFORD.

**A PUBLIC ANALYST'S CLAIM.**—At the County Court on April 11, before his Honour Judge Bagshawe, Dr. Voelcker (the borough analyst) sued the Bedford Corporation for 21*l.* for fees for making analyses. Mr. T. Low (solicitor to the Society of Public Analysts) appeared for the plaintiff, and Mr. Bonsey (instructed by the Town Clerk) for the defendants. Mr. Low, in opening the case, said Dr. Voelcker was appointed public analyst to the Bedford Corporation in May, 1887, on the condition that he was to receive 1 guinea for every sample submitted for analysis. In the following November various articles were sent to him from Bedford for

analysis, and among them were two samples of coffee. Of the fourteen samples thirteen were reported genuine, and no question could be raised on these, as no prosecution could follow. One sample of coffee was found to contain 80 per cent. of chicory, and in reporting this case Dr. Voelcker did not use the form of certificate as prescribed by the Act, and failed to insert the weight of the sample, quite by accident, and in consequence of that the Corporation said it was useless to them, as they could not take proceedings on it against the owner of the sample. But, while refusing to pay for this one sample, the Corporation also refused to pay for the whole fourteen samples. The omission of the weight in this instance did not render the certificate useless, and he submitted that it was a good and sufficient statutory certificate under the Act. In the case of a prosecution, if the Court did not accept the certificate, the presence of the analyst would be all that was necessary, and he informed the Corporation he would be ready to attend if wanted. He also offered to amend the certificate, but the Corporation said that after the certificate had once left his hands he could not alter it. The judge said the point was as to whether the insertion of the weight was material in this instance. Dr. Voelcker stated that he weighed the sample of coffee, and it was 5 oz. In all cases of analysis of coffee the weight was perfectly immaterial to the analysis, however small the sample might be. The judge expressed his opinion that it was the intention for the weight to be inserted in all cases, except where it could not be done. Mr. Bonsey pointed out that one of the certificates was not signed, and was, therefore, useless. The judge was satisfied that the certificate must be made out according to the statute, and, after it had once left the analyst's hands, he could not alter it. He thought some of the certificates informal, but reserved judgment, and Mr. Low pressed his Honour to carefully consider the question of power to amend the certificate.

### BIRMINGHAM.

**POISONED WITH BELLADONNA.**—On Monday night a married woman named Mary Ann White (38), of Bellbarn Road, attempted to commit suicide by taking a dose of belladonna liniment. The woman is supposed to have taken the poison in a fit of melancholia. A fatal result is not anticipated.

**COLMAN'S MUSTARD.**—At the Oldbury Police-court on Tuesday Walter Cooper, a grocer, was charged with selling adulterated mustard on March 8. It appeared that the mustard was manufactured by Messrs. J. and J. Colman, and Dr. Swete, analyst for the county of Worcester, said that it contained at least 10 per cent., or probably more, of wheat starch. For the defence Mr. Kennett maintained, and in this he was supported by Mr. Francis Sutton, of Norwich, analyst to the county of Norfolk, that the addition of wheaten flour was necessary to keep mustard. Mr. Sutton added that if the mustard was not mixed it changed colour, and became lumpy. Mr. E. Heelis (Mayor of West Bromwich) was also called to speak as to the different qualities of mustard sold. The mixed mustard was an article required by the public, and 85 per cent. more of that article was sold than pure mustard. The magistrates dismissed the case, but declined to grant Mr. Kennett's application for costs.

### BLACKPOOL.

**A LADY POISONED WITH CHLORAL.**—On Saturday an inquest was held on the body of Annie Hutchinson, of this town. She was thirty-two, and wife of a bill-poster. Twelve months ago she had a prescription from Dr. Lund, of Manchester, and had been in the habit of getting the medicine made up by Mr. Fisher, chemist, Blackpool, when she had the headache. On Wednesday she sent out for two glasses of stout and a bottle of medicine, but the prescription she sent did not correspond with that of the Manchester physician. She took a dose of the medicine, and afterwards sent the girl downstairs for some water. When her husband went to bed he found her dead. Dr. Williams, who was called in, stated he had attended the deceased when she was suffering from alcoholism. He found a bottle under the bed containing chloral hydrate. The dose deceased had taken was a poisonous one, being 80 grains, or double the dose marked



on the bottle. There was no mistake on the part of the chemist. The jury returned a verdict that deceased died from an overdose of chloral hydrate, taken by misadventure, and added as a rider that the chemist was free from blame.

### LEICESTER.

**RETALIATION.**—This is how a firm of Leicester chemists reply to the common enemy:—"Further reductions.

"We don't want to fight,  
But by jingo if we do.

"The above lines are very applicable to the present state of trade. We are constantly being reminded of the fact that a certain Stores ought only to be patronised. The qualification set up is that by so doing you will get pecuniary advantages. We would ask our friends in this neighbourhood to compare prices, and see where the advantage lies. We are not to be snuffed out quite so easily. We can and do buy and sell equally with any so-called Stores, and in many cases cheaper. At no time during our forty-nine years' trading can anyone come forward and say that we have ever exceeded the present Low Charges for Dispensing and Medicines generally. It is no new thing for us to charge 9d. for half-pint ordinary Medicines. Our prices for Ordinary Mixtures are as follows:—4-oz. bottles 6d., 6-oz. bottles 8d., 8-oz. bottles 9d., 12-oz. bottles 1s. Pills are charged 3d. per doz., coated."

### LIVERPOOL.

**CARBOLIC ACID** was again the medium of suicide in a case which came before the coroner on Thursday of last week. The victim was a man named John McDonald, 51 years of age, who resided at 15 College Lane, and who took the poison as a comfort in his poverty.

**CHEMISTS' ASSISTANTS' SOCIETY.**—The members met in their new rooms in Colquitt Street on Thursday evening last, when Mr. Jackson read an interesting paper on "Landscape Photography." The day of meeting was altered from Tuesday to Thursday on this occasion, on account of the Easter holidays.

**A CHEMISTS' GRIEVANCE.**—Chemists have so many stereotyped grievances that it is somewhat refreshing to hear of a new one. Messrs. Livermore Brothers had for two or three weeks been advertising their "Court Minstrels" by means of a coach and four driven by a coachman in heavy gold lace, the guard occasionally blowing a horn as he passed along the various thoroughfares. Last week they were summoned before the magistrates at the request of Messrs. Clay & Abraham for having thus caused a nuisance in Bold Street. On their undertaking not to repeat the offence the case was dismissed.

**RISE IN SUGAR.**—The large sugar-refining interests of Liverpool have been in a somewhat excited state on account of the rapid rise, which has reached 3s. 6d. to 4s. per cwt. during the last fortnight. This is partly due to the belief that the Sugar Bounty Bill will pass, creating a monopoly, and putting up prices considerably; but this is rather fallacious, as, if passed, the Convention will not come into operation for two years, and by that time the sugar-cane plantations in our colonies may be again in an active state of production. No doubt, however, the beet crop for the year was over-estimated by over 100,000 tons, and, with an active demand here and on the Continent for the United States, prices must still rise for a time, with a probable relapse in December. Chemists who use much sugar, and mineral-water makers, should look after a six-months' supply, bearing in mind that American granulated sugar can no longer be relied on as being "pure cane."

### MANSFIELD.

**TAKING THE WRONG MEDICINE.**—An inquest was held on Tuesday respecting the death of Mr. W. G. Crowther, a much-respected resident of the town. The circumstances of the death were very painful, and the coroner expressed the sympathy of the jury with the relatives. Evidence was given by Mrs. Crowther, the widow of deceased, and Dr. Jones. It appeared that deceased was 58 years of age, and

a week ago last Friday Dr. Jones was called in to attend him. He was suffering from sciatica, and Dr. Jones sent some pills, mixture, and liniment which was to be applied to the affected parts. On Friday morning last Mrs. Crowther in error administered to deceased a small quantity of the liniment, which was of a poisonous character. She mistook the bottle for another small bottle that had contained a draught. Deceased became unconscious, and Mrs. Crowther sent for Dr. Jones, but was not then aware that she had administered the wrong medicine. Dr. Jones and his assistant were with deceased most of Friday, and he regained consciousness about midnight. The liniment, it was stated, contained belladonna, aconite, and opium, and a small dose might prove fatal. Deceased had got through the opium poisoning, and then the aconite came into play. This caused collapse, from which deceased died. The jury returned a verdict "That deceased died from taking a dose of liniment containing aconite, such having been administered to him by mistake or misadventure, and the jurors recommend that the word 'Poison' should be printed on a label or affixed to bottles containing such preparations sent out by medical men and others as an additional precaution." Dr. Jones was entirely acquitted of any blame in the matter.

### STONE.

**ADULTERATED OLIVE OIL.**—At the local court last week Mr. William Henry Jenkins, chemist, High Street, was summoned for selling a bottle of olive oil on February 8 which Mr. Jones, public analyst, certified to be adulterated to the extent of 40 per cent. with cotton-seed oil. For the defence, Mr. W. A. Child, traveller for the firm which supplied the oil, produced a certificate showing that an analysis had been made of the sample left with Mr. Jenkins, and that it had been found unadulterated. The chairman said the Bench must be guided by the analysis of the public analyst. Mr. Jenkins would be fined 5l. and 16s. 6d. costs. They did not attach any blame for the adulteration to Mr. Jenkins, but the law made him liable for the sale.

### IRELAND.

**MESSRS. MAXWELL, GREER & Co.** have opened a handsome new shop in Foyle Street, Londonderry (opposite Jury's Hotel), as wholesale drug and general merchants. The exterior is painted in terra-cotta, with black and gold lines, and the interior presents a very attractive appearance, with show-cases, dispensing department, and all best fittings. Stores for the wholesale trade are at the rear.

**THE ANALYST'S SIGNATURE.**—On Wednesday, in the Queen's Bench Division, Dublin, before Justices O'Brien, Murphy, Holmes, and Gibson, a case was argued of the Guardians of Galway Union v. Michael Kelly. It came on upon a case stated by the magistrates of Galway. The guardians, on November 15, 1888, summoned Michael Kelly, who was a contractor for the supply of milk to the workhouse, for having, as they alleged, supplied a quantity of milk adulterated with water to the extent of 14 per cent. of the milk. There were also similar summonses against four other contractors. On the hearing of the summons against Kelly proof was given that his bond bound him to supply pure milk, and a certificate as to the quality of the article that he did supply, from Sir Charles Cameron, was produced, and purporting to bear his signature, and the Clerk of the Union deposed that he had been in the habit of corresponding with Sir Charles for years, and that he believed the signature to be his, but that he had never seen him write. The magistrates held that the proof of the authenticity of the certificate was insufficient, and dismissed all the summonses. The MacDermott, Q.C., with whom was Mr. MacEuerney, instructed by Mr. Redmond McDonagh, on the part of the guardians, submitted that the decision of the magistrates was wrong. Mr. J. M. Taylor, instructed by Mr. P. J. Daly for the respondent Kelly, argued that there should have been a personal vouching of the certificate by Sir Charles Cameron. Mr. Justice O'Brien: Your client will have to give up adulterating milk. The MacDermott: In some of the cases the milk contained 48 per cent. of water. Mr. Justice O'Brien said the court were of opinion that the ruling of the magis-



trates was not correct, and that the summonses should be remitted back to them, with a view to the proceedings being carried on. Costs, in all the cases, to the guardians.

## SCOTLAND.

### EDINBURGH.

ON Sunday last between 10,000 and 11,000 persons visited the Botanic Gardens with evident indications of appreciation of the new privilege.

AMONGST the Bachelors of Science who were capped at the graduation ceremonial of the Edinburgh University on Thursday last (April 18) was Mr. George Coull, president of the local Assistants' Association. Mr. Coull has taken his degree in the department of the physical experimental sciences. We understand that he has recently entered the services of Messrs. Raimes, Clark & Co. as their analytical chemist.

THEFT OF DRUGGISTS' GOODS.—At the Sheriff Criminal Court on Tuesday Thomas Henderson and William Wallace pleaded guilty to having stolen, between December 1 and April 12, at the shop in Duke Street, Edinburgh, occupied by T. & H. Smith & Co., druggists, 48 jars of extract of meat, 72 cakes of soap, 30 bottles of Indian oil, 30 packets of Prairie Flower, and a few small articles. After hearing Mr. Shaw, advocate, for the prisoners, Sheriff Crichton passed sentence of six weeks' imprisonment each, from the date of their incarceration, April 15, they not having been before in court.

WARNING TO CHEMISTS.—Under this heading "S. C." writes as follows in Tuesday's *Scotsman*:—"There is a man going about, particularly among scientific chemists, trying to get money under false pretences. He gives different names, speaks with a strong German accent, and often represents himself as a chemist wanting a situation. When I saw him on Saturday he wore a dark overcoat, clothes a little shabby, and with round-topped black felt hat. He is of middle size, nose a little hooked, wears beard and moustache, hair fair and tending to curl. He generally offers a pawn-ticket of a gold watch, &c., which he pretends he has been obliged to pawn. Chemists were warned against him in the *Chemical News* a year or two ago."

### GLASGOW.

"LIQ. STRYCH. AND A KICK" is the mysterious sentence advertised in large type in our local papers. Whether it refers to some new sensational novel, or a "new departure" in the drug trade, is still a matter of profound uncertainty.

BUSINESS CHANGES.—The shop of Mr. Barrie, Pollok-shields, has passed into the hands of Mr. Kennedy from Ayr, and Mr. John McMillan has opened a very handsome and well-appointed branch in Hillhead. We also hear of several forthcoming additions to the already redundant list of doctors' shops. Thus enterprise, like hope, "springs eternal in the human breast."

HOSPITAL DRUGS.—In the annual report of the Glasgow Royal Infirmary for 1888 the list of medicines used in the dispensary comprises 134*l.* 10*s.* 9*d.* for carbolic acid and phenol; paraffin, 16*l.* 7*s.* 8*d.*; chloroform, 51*l.* 19*s.*; lime juice, 19*l.* 10*s.*; sugar for pharmaceutical purposes, 34*l.* 17*s.* 6*d.*; sponges, 30*l.* 12*s.* 7*d.*; extract of malt, 14*l.* 3*s.* 9*d.*; methylated spirit, 51*l.* 13*s.* 3*d.*; general medicines, 1,145*l.* 18*s.* 10*d.*

WINE LICENCES.—The refusal to grant a wine licence to Mr. Galbraith has excited much comment among druggists in town, particularly as several well-known firms in the trade already possess the licence, which was granted to them on the understanding that no Sunday trafficking in wines would take place. It seems odd, not to say invidious, that an exception should have been made in Mr. Galbraith's case.

POISONING FATALITIES.—A man named McLean was found dead in his room at Greenock with an empty bottle labelled "Laudanum" close at hand. McLean, who was a man of superior attainments, and a frequent contributor to the local press, had been in straitened circumstances for some time, and this is supposed to have driven him to suicide.—On Saturday se'nnight Alexander Findlay, engine-fitter, who resides at 345 Springburn Road, Glasgow, administered to an

infant daughter, nine months old, some opium powder in mistake for a Steedman's soothing-powder. The child was unable to sleep off the dose, and died on Sunday afternoon.—Robert Smith, tinsmith, Lossiemouth, committed suicide by drinking about half a gill of aquafortis. He survived for some time, and stated to the doctor that he had been suffering from a severe headache, and disturbed by horrible dreams through the night, and he thought it was better to put an end to his existence.

## FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

CHEMISTRY IN NANCY.—By a law, published on April 14, the City of Nancy has been authorised to borrow 20,000*l.* for establishing a chemical and an anatomical institute. The rate of interest must not exceed 4½ per cent., and the principal is to be refunded within forty years.

EXPLOSION IN A CHEMICAL WORKS.—On April 17 a pressure digesting apparatus in M. Brignonnet's chemical works, 15 Route du Landy, at St. Denis, exploded with terrific violence. The fireman, Delfino Borrela, an Italian, for ten years employed in the factory, was so seriously injured that he died the same evening at the Lariboisière hospital. The digester in question was used for manufacturing dimethyl-anilin.

OH FOR ANOTHER CHEVREUL!—One of the most sensible remarks made respecting the illustrious chemist was uttered the other day by Professor Duclaux, of the Pasteur Institute. He said: "The researches on fatty bodies, published in 1823, are to-day almost as new as when they first appeared. And to appreciate their importance it is enough only to imagine what honour and gratitude would reward the chemist who could to-day do for albuminoids, for instance, what Chevreul did for the fatty substances, which before him were in the same state of confusion, chemically, as albuminoids are at present."

THE INTERNATIONAL CONGRESS OF THERAPEUTICS AND MATERIA MEDICA, to be held on August 1, begins to take shape. The Patronage committee, whose list has just been published, includes among others the following well-known gentlemen:—For Alsace-Lorraine, Professor Fluckiger, of Strasbourg; for Great Britain, Drs. Fraser, of Edinburgh, Holmes, Burney Yeo, Lauder Brunton, and Paul, of London; Australia, Dr. Crivelly, of Melbourne; United States, Professors Wood, Robert Bartholow, and Meade Smith; Belgium, Drs. Masius and Rommelaer; Denmark, Professor Reiss, of Copenhagen; Holland, Professors Stokwis and De Vrij; and for Turkey, Dr. Zambaco Pacha, physician to H.M. the Sultan. Austro-Hungary, Brazil, Canada, Chili, Spain, Italy, Mexico, Norway, Portugal, the Argentine Republic, Roumania, Russia, Sweden, Switzerland, and of course France, are equally well represented.

ADULTERATED TEA OF REPORTED ENGLISH ORIGIN.—Some time since the Dunkerque municipal laboratory seized in a local shop specimens of tea which proved to be adulterated. The cases had been procured from a Paris house, where samples were also seized, and submitted to Professor Riche, of the College of Pharmacy, and another professor of the same institution. They have found the leaves to be naturally brown, but to have been dyed bluish green and rolled up so as to resemble the sort known as gunpowder tea. A strange circumstance is that the specimens were found to contain small quantities of theine. The leaves, apparently from a shrub of the Camelia family, had been shorn so as to acquire the long ovoid form of genuine tea. But they are not tea leaves. A suspicious fact is the extreme cheapness of the price at which they were offered. The Paris firm admitted they had imported the goods in question, but denied having adulterated them in any way. They declared they procured them as they were direct from an English house at Cantou, whose name has not transpired. It is likely something more will be heard about the affair.

A BAD FURNACE.—That pet of the Municipal Council's, the crematory furnace at the Père-Lachaise cemetery, appears to work badly. So much dissatisfaction was ex-



pressed with its performance the other day, on the occasion of the third cremation, that important changes will have to be made by our ediles if they wish to attract custom. The furnace, it seems, is not only very slow, but requires besides such quantities of wood—an expensive fuel—that only wealthy people can afford the good old-fashioned pagan funeral favoured by our city fathers. If the working-classes are to also enjoy the same privilege, an improvement is evidently necessary. It is now announced that M. Guichard, a municipal councilman, is perfecting an apparatus wherein by means of gas and compressed air a temperature of  $1,700^{\circ}\text{C}$ .—that is, twice as high as can be obtained with wood—will readily be secured in a short time. Preliminary experiments made at Popp's works in Ménilmontant are reported to have been successful.

**EDISON'S PHONOGRAPH AT THE ACADEMY OF SCIENCES.**—At the postponed sitting of April 23 M. Janssen presented a model of the phonograph, as now perfected by Mr. Edison, and described the improvements, making of it, as it were, a new instrument. In lieu of the old tinfoil receiver cylinders of a waxy composition are used, and two styles are employed—one for marking on the receiver and the other for reproducing the sounds. The instrument has also an electrical regulator, much like that known in observatories, whereby perfectly regular motions may be obtained and reproduced—a very important appliance for an exact registration and rendering of sounds. The apparatus may be stopped or started again at any time, either during the reception or reproduction, and so perfect is the mechanism that the same cylinder, once prepared, may be made to “speak” four or five thousand times. Colonel Gouraud, Edison's representative, was now introduced, and requested to illustrate the working of the phonograph. This he did in the usual manner, and on adjusting the tin funnel to the phonograph his short speech was repeated very accurately, but with the well-known tone of voice that can best be compared to Punch's in the show. He showed, however, by speaking himself through the funnel, that the unpleasant tone is not inherent to the phonograph, but to the funnel, and, substituting rubber acoustic tubes, enabled the academicians to judge for themselves. They declared they were more than satisfied—they were astounded. Colonel Gouraud, addressing again the Academy, remarked that, although the son of a French father, having been brought up in a foreign country, he was forty years of age when he took his first lesson of French, and therefore begged to be excused. Judging from his looks, he must have begun learning French four or five years ago, and spoke it very well indeed—an accomplishment he modestly explained by saying he had practised his speech with the help of the phonograph. Some of the improvements in the instrument presented to the Academy, he added, were entirely new; they had been purposely made for the occasion, and never appeared in Europe before. After listening to music, speeches, &c., very well repeated by the phonograph, the Academy ordered that the communication be allowed four pages of the *Comptes Rendus*, instead of the regulation two pages, and requested ex-President Janssen to revise the copy.

**NO TURNSTILES AT THE EXPOSITION.**—It has officially been announced that there shall be no turnstiles and no money shall be received at the gates—which means, not that admittance is to be free, but that tickets must be procured beforehand. As some thirty millions of them have already been issued and paid for, there will be no difficulty in obtaining the necessary pasteboard. And, by the way, some venerable gentlemen are dreadfully shocked because in all official documents the English word “ticket” has been used, and not the French equivalent “billet.” Well, it is too late to complain; the term has been in common use here for nearly twenty years, and has apparently “come to stay.” Besides, “ticket” is only a modification of the French word “étiquette,” and the wayward child is naturally welcome home again notwithstanding the foreign “k” altering its looks. However it may be, the price of the tickets is only 1*l*.; but on some occasions, and on certain days, several tickets will have to be given for a single admittance.

ONE part of boric acid added to 50,000 parts of varnish is said by the *Popular Science News* to make the varnish adhere to metal.

## Trade Notes.

HENRY HODDER & Co. (LIMITED), “Chemists to the People,” are advertising in the Bristol papers:—“1,080*l*. worth Beecham's pills just to hand.”

THE proprietors of “Pasta Mack,” the fashionable bath perfume, have introduced a “Pasta Mack Sachet,” which yields to handkerchiefs or other linen goods the delicate odour which makes the bath tablet so popular with ladies. It is prettily put up, and sells at 6*d*. We understand that samples of the “Pasta Mack” for free distribution may be had by chemists.

THE BOARD OF DIRECTORS of the Farben fabriken, vormals Friedr. Bayer & Co., Elberfeld, recommend a dividend of 12 per cent. for the financial year 1888, against 7 per cent. distributed in 1887, in addition to which a large amount is carried to the reserve fund. In order to meet the requirements of the newly-developed business in medicinal chemicals (sulphonal, phenacetin, &c.), it is proposed to increase the share capital to 9,000,000 marks by the issue of 1,500 new 1,000-mark shares.

“HEBE.”—Thompson, Walters, Hole & Co. (Limited) send us a sample of this face lotion, for the distribution of which to the trade they have been appointed sole wholesale agents. “Hebe” is put up in attractive cartons, bearing the portrait of Ellen Terry. It is under the patronage of royalty, for the Duchess of Teck uses it, and more than a dozen ladies of the nobility. Opera and drama publicly acknowledge its virtues in preserving their charms. “Hebe” is most in request during the summer season, and to bring it under the notice of ladies yet unacquainted with it, the agents supply all chemists taking a dozen of it with an artistic and highly attractive framed show-card. The centre figure of this card is a *facsimile* reproduction of a pretty water colour sketch, and as the design is out of the usual run of show-cards, this advertisement of “Hebe” should be a profitable and attractive addition to the decorations of the pharmacy.

## Pharmaceutical Society of Great Britain.

### EXAMINATIONS IN LONDON.

April 9, 10, 11, 12, 16, and 17.

#### MAJOR EXAMINATION.

Twenty-eight candidates were examined. Thirteen failed. The undermentioned passed, and were declared qualified to be registered as pharmaceutical chemists:—

Arden, Lawrence, Bourne	Metcalfe, Arthur Pollard, Doncaster
Austin, William H., Devonport	Ogle, John Henry, London
Bowden, Francis Henry, Manchester	Rudd, Henry Bulmer, Bradford
Davies, Robert Higgins, Dartford	Surfleet, Arthur G., Gainsborough
Duckworth, Arthur, Roehdale	Tregellas, Clifton Pari, London
Hart, Frank, Bolton	Whitfield, George, Scarborough
James, William M., Market Drayton	Woodruff, Thomas, Stalybridge
Johnson, John Robert, Cambridge	

#### MINOR EXAMINATION.

One hundred and sixty-seven candidates were examined. Ninety-nine failed. The undermentioned passed, and were declared qualified to be registered as chemists and druggists:—

Aplin, John Dare, Colyton	Daily, Dionysius Lees, London
Ball, John Arthur, Nottingham	Denuy, John Harvey, Woodbridge
Bayliff, John T., Kirkby Lonsdale	Duncan, William, Elgin
Beach, William Bertram, Bridport	Ellerker, Henry, Ripon
Beleher, Robt. Brown, Birmingham	Enderby, John Edward, Spalding
Bird, Frederick Wm., Coventry	Evans, John Watkin M., London
Bourne, Henry Fred, Louth	Evans, Joshua William, Llandysul
Bowes, Francis Henry, Whitby	Feather, Arad, Pontefract
Brown, Arthur, Loughborough	Fuge, Harry Dixon, Matlock Bath
Burnet, George Maxwell, Ashton	Fuller, George S., Thornton Heath
Churchyard, Oliver Geo., Ipswich	Gee, Ernest, Bath
Cook, Thomas Marsden, Hindley	Goode, Chas. E. A., Tunbridge Wells
Cussons, John William, Ossett	Goodwin, James, Nuneaton



Green, Walter Joseph, Frome  
Haslop, George, Oldham  
Hays, Frederick A., Birmingham  
Hemens, Wilfred Frank, Hutton  
Hemming, Francis H., Nottingham  
James, John, Llandilo  
Jeffery, Arthur H., Bridgnorth  
Jones, William Thos., Welington  
Kershaw, Sam, Heckmondwike  
Klosz, Sidney Albert, London  
Lloyd, James Clement, Lewes  
Longman, Samuel Henry, Bath  
Norman, Richard H., Cottenham  
Oldfield, Alexander, London  
Peacock, Henry, Sunderland  
Pearson, Herbert Sidney, London  
Pugh, Edward Lister, Leeds  
Rees, Arthur Kilsby, Whitland  
Reeve, Walter, Norwich  
Roberts, Alfred Dean, Lincoln  
Roberts, Weston, London

Shipman, Ernest Wm., Cheltenham  
Sisson, Edwin, Carlisle  
Smith, Albert, Royston  
Spurr, Herbert Edward, Leeds  
Stedman, Arthur, West Malling  
Stonham, Herbert L., Maidstone  
Stott, Ernest L., Sowerby Bridge  
Stroud, Louis L., Newport, Salop  
Sykes, John, Southport  
Taylor, Joe Harry, Blackpool  
Thompson, Henry Clarence, Belford  
Thornley, John Brooks, London  
Tongue, Albert James, London  
Wallace, William John, Plympton  
Webber, Ernest D., Tunbridge Wells  
Whitehead, John Henry, Leeds  
Wilkes, Thomas James, London  
Williamson, Thomas J., Nottingham  
Wilson, William, Maryport  
Wilson, Wm. M. L., Walthamstow  
Woodcock, Bertrand J., Newark

Dawson, Alexander Fraser, Aberdeen  
Durno, Alexander Emslie, Aberdeen  
Evans, Stephen William, Sa'e  
Hall, John, Aberdeen  
Hollely, Thomas Lowe, Manchester  
Horne, Thomas, Paisley  
Hurst, Richard Proudman, Ram-bottom  
Jewell, Arthur Furniss, Liverpool  
Law, James, Inseh  
Lawrence, John, jun., Glasgow  
Lotbion, John, Edinburgh  
McCurrie, John, Edinburgh  
McDonald, George, Glasgow  
Maley, George Joughin, Liverpool

Martin, John, Newcastle-on Tyne  
Melrose, William, Greenock  
Menzies, George Wilson, Glasgow  
Milne, Henry, Aberdeen  
Mitchell, Robert Harry, Liverpool  
Moxon, John Lawrence, Liverpool  
Nicholson, Allan McDona'd, Edinburgh  
Robertson, Robert, Leith  
Sinclair, Neil Crawford, Greenock  
Smart, James, Edinburgh  
Smith, Alexander, Elgin  
Stirling, David Alexander, Dunoon  
Walker, John Brown, Edinburgh  
Weatherston, Francis Beattie, Belfast  
Williams, William, Carnarvon

#### MODIFIED EXAMINATION.

One candidate was examined, but failed to pass.

#### EXAMINATIONS IN EDINBURGH.

The Board of Examiners for Scotland met at the Society's house, 36 York Place, on April 16, 17, 18, 23, and 24, for the purpose of conducting the Major, Minor, and Modified Examinations, according to the Pharmacy Acts, 1852 and 1868. The following gentlemen were successful:—

##### MAJOR EXAMINATION.

Coats, John Thomson, Edinburgh.

##### MINOR EXAMINATION.

Askew, John Robert, Sunderland  
Bates, John, Manchester  
Blenkiron, Jeremy, Rock Ferry

Cargill, David Allan, Arbroath  
Cowie, William Beaverly, Edinburgh

#### MODIFIED EXAMINATION.

Lawford, Charles William, Huddersfield.

#### NORTH BRITISH BRANCH.

A meeting of the executive was held in the Society's house, 36 York Place, Edinburgh, on Wednesday afternoon. There were present Messrs. Strachan, Aberdeen; Fisher, Dunfermline; Storrar, Kirkcaldy; Watt, Haddington; Nesbit, Portobello; Kinninmont, Glasgow; Lawrence, Oban; J. M. Hardie, Dundee; and Messrs. Gilmour, Boa, Stephenson, Mackenzie, and Gibson, Edinburgh. Mr. Gilmour, chairman of the executive, presided. The business was of a formal and generally uninteresting character. A report from the General Purposes Committee was read and received with little comment, as it referred merely to small matters connected with the house. Arrangements were made for the election of executive in June. The 19th was fixed as the date. The annual report of the executive to the Council in London was read and discussed in committee; thereafter its adoption was moved by the chairman, seconded by the vice-chairman, and agreed to.



THE NIGHT BEFORE THE MINOR.



## BANKRUPTCY REPORTS.

*Re* WILLIAM FRANCIS NORMAN, Leamington, Chemist and Druggist.

THE first meeting of creditors in this bankruptcy was held at the offices of the Official Receiver, Coventry, on the 16th inst. Proofs were received amounting to 407*l.* 5*s.* 11*d.* The debtor's statement of affairs showed liabilities 1,610*l.* 3*s.* 7*d.*; assets 513*l.* 6*s.* 8*d.* The debtor filed his petition on April 1, stating that he commenced business in 1884 with a capital of 200*l.*, purchasing the business of Mr. Thornton, of Warwick Street. He removed to Bertie Road in March, 1888, carrying on the Warwick Street business by a manager, ultimately closing it in March last, as it was not paying. The stock has been taken and valued by Messrs. Wylcys & Co., the debtor's principal trade creditors. The premises in Bertie Road are owned by debtor's wife, who is entered as a creditor for 600*l.* Failure is attributed by the debtor to "loss on carrying on the business at Warwick Street, and sudden and undue pressure." After some discussion the following resolution was agreed to: "That the debtor's proposal to pay in full forthwith, on approval by the Court, all preferential debts as defined by section 40 of the Bankruptcy Act, 1883, together with all proper fees, costs, charges and expenses of and incidental to these proceedings; also to pay to all unsecured creditors in full discharge of all debts provable under the receiving order a composition of 10*s.* in the pound, payable by three instalments of 2*s.* 6*d.*, 3*s.* 6*d.*, and 4*s.* at six weeks, six months, and twelve months respectively from the date of the last. Two instalments to be secured to the satisfaction of the Official Receiver. The Official Receiver to receive and distribute the composition, and the receiving order to be rescinded." The debtor appeared for his public examination at the Warwick County Court on the 18th inst. In answer to questions he said the price of a chemist's business was supposed to be one year's turnover. The sum he paid for the business was 707*l.*, including 100*l.* for household furniture. He borrowed part of the purchase money from his wife before he married her, and it was still owing. The money was not a gift, but there was no memorandum in reference to the loan. His wife had some property in Bertie Road, but he had no interest whatever in it. He did not find the business answer his expectations. He bought the business in Bertie Road in order to protect his trade in Warwick Street. He closed the Warwick Street premises when he found the business was decreasing. His wife and himself suffered from typhoid fever for a considerable time in consequence of the insanitary condition of the premises in Warwick Street. The Leamington Mineral Water Company served him with a writ, and he allowed judgment to go by default. The primary cause of his failure was want of capital and stock. His personal expenditure had never exceeded 160*l.* He had not lost any of his creditors' money by recklessness or extravagance. He considered that his earnings on an average had been 100*l.*, but in consequence of illness his expenditure had greatly exceeded that sum. The amount of his liabilities (1,670*l.*) included the debt of 600*l.* due to his wife. He believed that his assets would be about 500*l.* He reckoned depreciation in stock at 400*l.*, but this had not taken place wholly in the last year. The debtor was allowed to pass his examination.

*Re* WESLEY DARLEY, Meadow Lodge, Lea Bridge Road, lately Managing Director of the New Carbolic Sanitary Company (Limited), Manor Place, Hackney.

MR. REGISTRAR GIFFARD presided at the London Bankruptcy Court on April 17, when the bankrupt attended for the hearing of his public examination. In reply to Mr. Howell, who represented the Official Receiver, the bankrupt stated that he was forced to file his petition on March 12 last in consequence of pressure by creditors, although he did not consider himself to be insolvent. He repeated the particulars of his position, already reported in this journal, April 13, 1889. The Official Receiver was aware of his claim upon the New Carbolic Sanitary Company for 100*l.*, salary due, and would, no doubt, receive the full amount in due course. His principal asset consisted of his residence, which was worth 1,500*l.* and mortgaged to a bank for 820*l.* The bank had refused to

advanced him more money thereon. He had sold it for 1,500*l.*, but the sale was not completed, and it was owing to the arrangement falling through that he was in his present position. In 1877 he filed a liquidation petition, and had not applied for his discharge from those proceedings. Replying to Mr. Chambers, a creditor, the bankrupt said he gave a bill of sale upon his furniture in December last for 200*l.* Part of the money he paid to his wife, as some of the furniture was her separate property, and some of it went in repayment of money previously borrowed. The examination was ordered to be concluded.

*Re* E. A. A. FRY, Sevenoaks, Chemist and Druggist.

A FURTHER meeting of the creditors interested herein was held on Wednesday at the London Bankruptcy Court, before Mr. A. Mackintosh, the Brighton Official Receiver. The debtor, who failed last month, with unsecured debts 880*l.* 11*s.* 10*d.*, and assets valued at 173*l.* 2*s.* 8*d.*, after providing for the preferential claims, had been adjudged bankrupt, but it was stated at a former meeting that he would probably arrange to purchase the estate from the court. Mr. Wardley (Palmer & Wardley) attended for the debtor, and submitted a composition scheme, which provided for the payment in full of all costs and preferential claims, and a composition of 7*s.* 6*d.* in the pound to the unsecured creditors. The Chairman reported favourably of the arrangement, and the same was unanimously agreed to by the creditors.

*Re* BENJAMIN BANKS, Folkestone, Chemist and Druggist.

THE adjourned first meeting of creditors under this failure was held on April 20, before Mr. Worsfold Mowll, the East-Kent Official Receiver. Full details of the preliminary proceedings appeared in last week's CHEMIST AND DRUGGIST. The meeting now reported was purely formal. Mr. F. Nichols, of 14 Old Jewry, was appointed trustee, with the following as a committee of inspection:—Mr. L. Newbery, King Edward Street; Mr. Johnson (Bourne, Taylor & Johnson), Furnival's Inn; and Mr. J. H. Brooke, Folkestone.

## TRADE-MARKS APPLIED FOR.

THE *Trade Marks Journal* publishes the following notice:—"Any person who has good grounds of objection to the registration of any of the following marks may, at any time within two months of the date of this journal, give notice in duplicate, at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1883, of opposition to such registration." All communications to be addressed to H. Reader Lack, Esq., Comptroller General, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

*From the "Trade Marks Journal," April 24, 1889.*

"IVY," with twig of ivy leaves intertwined; for chemical substances, Classes 2 and 3. By Goodwin Brothers, Ordsall Lane Soap Works, Manchester. 85,768-9.

"A. T. S. JONES' OIL OF OLIVET," other wording and design on label; for a medicinal oil. By A. T. S. Davies, 114 Cheapside, E.C. 82,900.

"IMPERIAL," under figure of a crown; for quinine wine. By Thomas P. Mallorie & Co., Briggate, Leeds. 84,210.

"DERMINE"; for chemical substances, Class 3. By S. Bergheim, 11 Billiter Square, E.C. 84,809.

"OPPENHEIMERS CREAM OF MALT WITH COD-LIVER OIL AND HYPHOSPHITES," on fancy label; for a chemical substance. By Oppenheimer Brothers & Co., also trading as Oppenheimers, Sun Street, Finsbury, E.C. 85,156.

"FREEMAN'S HERCULES TABLE JELLY"; for substances used as food. By Freeman & Hildyard, 27 Great Dover Street, Borough. 83,556.

Female figure with flowers; for perfumery. By Earnett & Co., 31 Broad Street, Birmingham. 84,980.

Woman's face on medallion; for preparation for the teeth. By W. H. Peacock, 49 Newgate Street, E.C. 85,152.



## News.

**THE ROTHAMSTEAD LABORATORY.**—Sir John Lawes's munificent arrangement for devoting the sum of 100,000*l.* to the perpetuation of his valuable field and laboratory experiments is about to be completed. The sum will be placed in the hands of three trustees, who will have granted to them a lease of the laboratory and experimental fields at Rothamstead, with power to purchase land for the purposes of the trust. The income of the fund will be handed over to a committee of nine persons, consisting of four Fellows of the Royal Society, one Fellow of the Linnean Society, two members of the Royal Agricultural Society, one Fellow of the Chemical Society, and the owner of Rothamstead for the time being.

The harmlessness of sulphonal was demonstrated practically at Riedel's chemical works in Berlin the other day. One of the workmen there wished to administer the hypnotic to his wife, who suffered from insomnia, but thought it desirable to make an experiment upon himself before doing so. He accordingly swallowed 450 grains of sulphonal in two table-spoonfuls. The man slept quietly and uninterruptedly for fully ninety hours, awoke for a few hours, and again slept for twenty-four hours more. No ill effects have resulted. A detailed report on this extraordinary case will shortly be published in one of the German medical journals.

A RECENT issue of an Australian illustrated journal contains a bird's-eye view of a place called "Broken Hill," New South Wales, a mining town of recent growth. The founders have hit upon the original plan of giving all the streets chemical names. Argent Street, Beryl Street, and Cobalt Street are the principal; arterics have such names as Kaolin, Iodide, Oxide, Bromide, and Sulphide Streets—the latter the site of the two Wesleyan churches, and also of the recreation grounds.

In their report the New Civil Service Co-operation (Limited) states that for the six months ending February 28 the sales amounted to 82,492*l.*, a decrease of 798*l.* The gross profit, after allowing for carriage of goods, amounted to 7,139*l.*; adding to this the revenue from other sources and deducting working expenses, there remains a net profit for the half-year of 1,609*l.*, which, with the balance brought forward, makes a total of 2,735*l.* The directors recommend a dividend of 6*l.* per share, tax free, being at the rate of 10 per cent. per annum, leaving 1,198*l.* to be carried forward. The dividend will be payable at the stores on May 10.

## Gazette.

### PARTNERSHIP DISSOLVED.

Gardner, Phillips & Co., Bristol, soap manufacturers.

### THE BANKRUPTCY ACT, 1883.

#### RECEIVING ORDERS.

Bonsor, Herbert Webb, Cumberland Market, Regent's Park, and Worcester Park, Surrey, vinegar brewer.

Briggs, Joseph, the younger, Lichfield, late of Bradford, mineral-water manufacturer.

Stevenson, Robert Albert William, Brigg, veterinary surgeon.

#### FIRST MEETINGS AND PUBLIC EXAMINATIONS.

Briggs, Joseph, the younger, Lichfield, late of Bradford, mineral-water manufacturer—May 9, Official Receiver's office, Walsall; May 9, Court House, Walsall.

Enright, John Anthony (trading as J. A. Enright & Co.), Llanerchymedd, mineral-water manufacturer—May 2, Bankruptcy office, Chester; May 9, Court House, Bangor.

Harman, Francis Bennett, Farmer's Road, Keunington Park, and Womersley Road, Crouch Hill, mineral-water manufacturer—May 3, Bankruptcy Buildings, Portugal Street, Lincoln's Inn Fields; May 23, 34 Lincoln's Inn Fields.

### ADJUDICATIONS.

Briggs, Joseph, jun., Lichfield, late of Bradford, mineral-water manufacturer.

Enright, John Anthony (trading as J. A. Enright & Co.), Llanerchymedd, mineral-water manufacturer.

Stevenson, Robert Albert William, Brigg, veterinary surgeon.

### NOTICES OF DIVIDENDS.

Carr, John, late of Southampton, qualified medical practitioner, registered—first div. of 5*s.*, April 23 or any subsequent Tuesday, 67 Flusbury Pavement, E.C.

Cripps, Henry (separate estate), Swanmead, Bermondsey, size and gelatine maker (trading with Arthur Ross, the younger, and Isaac Cripps, as Cripps, Ross & Co.)—first div. of 20*s.*, May 1, A. C. Palmer & Co.'s, 7 and 8 Railway Approach, London Bridge, S.E.

### ORDERS MADE ON APPLICATIONS FOR DISCHARGE.

Chapman, Levi (trading as Chapman & Co.), Coventry, mineral-water manufacturer—discharge suspended for fourteen days.

Howarth, Robert Scowcroft, Cheetham, Manchester, chemical manufacturer's manager—discharge suspended for six months.

### EXTRACTS FROM THE REGISTER OF DEEDS OF ARRANGEMENT.

The following deeds of arrangement with creditors have been filed at the Bills of Sale Office, under the provisions of the Deeds of Arrangement Act, 1887. Some of these deeds are for the purpose of carrying out compositions with creditors (and such are specified below), but the great majority of them are "assignments" in the ordinary form, to a trustee or trustees, for the benefit of creditors. The Act referred to expressly provides that registration shall not give validity to any deed which is an act of bankruptcy, and there is no provision, in the Act, making any of these arrangements binding upon dissenting creditors.

Hulse & Thomas, and Hulse & Co. (trading as Robert Hulse), Mander Street, Wolverhampton, chemical manufacturers. Trustee: G. Vaughan, Willenhall, solicitor. Date, April 8; filed, April 11; unsecured liabilities, 830*l.* 13*s.* 1*d.*; estimated net assets, 682*l.* 8*s.* 11*d.*; creditors fully secured, 650*l.*

	£	s.	d.
Baldwin & Son, Birmingham .. .. .	28	6	11
Bigwood & Son, Wolverhampton .. .. .	64	0	0
Birmingham, Dudley, and District Banking Company, Wolverhampton .. .. .	110	0	0
Bowler, M., Presteigne .. .. .	100	0	0
Duncan, W. A., Southport .. .. .	12	12	1
Hamm, T., & Co., Wolverhampton .. .. .	31	7	0
Hart, Jonas, Wolverhampton .. .. .	50	0	0
Hulse, Mrs., Sandbach .. .. .	207	0	0
Powell, H. G., Wolverhampton .. .. .	600	0	0
Simmonds, G., Birmingham .. .. .	28	9	9
Thomas, T., Willenhall .. .. .	178	0	0

Whitby, Robert, 47 Nicoll Road, Harlesden, surgeon; date, April 9; filed, April 16; unsecured liabilities, 454*l.* 4*s.* 4½*d.*; estimated net assets, 45*l.* 8*s.* 9*d.*; composition, 2*s.* in the pound forthwith.

	£	s.	d.
Franklin, Charles, Willesden .. .. .	13	12	0
Mackey & Mackey, London .. .. .	10	7	5
Mills, Maria (administratrix of the late Henry Mills, deceased), Hastings .. .. .	230	0	0
Owen, Mrs., Harlesden .. .. .	17	0	0
Van Praagh, Benjamin, London .. .. .	89	0	0
Wills, Thomas (executors of Caroline Mary Wills, deceased), Sudbury, W. .. .. .	36	0	0
Wormald, James, Harlesden .. .. .	14	3	2½

PEPSIN WINE should be made with detannated sherry wine. It should not be forgotten that the presence of alcohol in pepsin preparations is decidedly prejudicial.

GUAICOL.—The Pharmacopœia Commission of the German Apothekerverein states that guaicol should have a specific gravity of 1.117, and should boil at 210° C. It is soluble in 200 parts of water, and forms clear mixtures with rectified spirit, ether, and carbon bisulphide. The spirituous solution gives a blue colour with ferric chloride, passing to a green.



## Foreign and Colonial.

**BELGIAN PRIZES TO CHEMISTS.**—The Belgian Academy of Sciences have published the list of prize queries proposed for the year 1890. The following are of interest to chemists and physicists:—(1) Establish, by means of new experiments, the theory of the reactions presented by bodies in what is called the nascent state. (2) Expose and discuss, with the help of new experiments, the works relating to the kinetic theory of gases. The prizes offered are gold medals, worth 800f. for the first, and 600f. for the second. Memoirs may be written in French, Flemish, or Latin, and must be handed before August 1, 1890, to M. Liagre, perpetual secretary, Palais des Académies, Brussels. The usual academical conditions—that is, the enclosure of the writer's name in an envelope marked with a motto repeated on the memoir—are of course to be observed.

“FORGERIES are getting common here,” says the *Times of Ceylon* of March 9, “more especially in the Fort of Colombo. The latest forgery has been made on the Apothecaries' Company. A day or two ago a man presented to this company two documents, the first of which purported to be an order from Mr. J. D. Gibson, of the Ceylon Mercantile Bank, for a bottle of lavender water valued at 1.25 rupees. The success of his attempt led to a second one, and subsequently another order, purporting to come from the same person, was presented. Suspicion was aroused, and the messenger was asked to wait while Mr. Gibson was communicated with, but before the latter's reply was received, to the effect that he sent no such order, the man decamped. This, and similar attempts recently made, show that shopkeepers in the Fort cannot be too careful about executing suspicious orders.”

It is reported that some time ago the firm of Rothschild entered into an agreement with about three-fourths of the principal Russian petroleum-producers, that the latter should deliver the whole of their production to Rothschild's firm at a minimum rate of 12 copecks per pood, and one-half of the sale price over that figure, after deduction of a commission of 1 per cent. on the whole amount to Messrs. Rothschild. The firm decided to place the whole of this petroleum on the Chinese and Japanese markets, and the producers not included in the agreement were therefore able to find a comparatively free outlet elsewhere, with so much success that they were ultimately able to realise as much as 35 copecks per pood for their oil. This high price so excited the greed of the other producers who had agreed to supply the banking firm that they, one and all, according to the *Chemiker Zeitung*, have broken their contracts, placing the firm, who had already made large agreements to supply the Eastern markets, in a very awkward position.

**HEAVY FINE FOR ADULTERATING SAFFRON.**—On April 6 a case was heard before the Landgericht in Giessen (Germany) in which a Mr. A. Noll, a well-known merchant, was charged with the wilful adulteration of saffron with intent to defraud his customers. It was proved that Mr. Noll bought from the Frankfurt firm of Hartmann & Meyenberg a parcel of saffron, which upon examination he found to be adulterated with 1 per cent. of carbonate of barium. He at first refused acceptance of the goods, but ultimately agreed to keep them against an allowance of about 8% on the invoice amount. In his own warehouse he further adulterated the drug and then sold it to his customers. Two of the defendant's employes proved that a certain quantity of saffron was regularly manufactured in the warehouse every three or four weeks and shown to the defendant before it went to the customers. Sixty different offences were proved, the penalty being a fine of 100m. in each case, an aggregate of 300%, and costs. The accused held the honorary title of “Commerciënrath,” a dignity which is only conferred upon traders of the highest standing and reputed respectability.

**QUICKSILVER MINES.**—The quicksilver mine at Almaden Spain is said to have been discovered 400 years B. C. For twenty-two centuries it has been in course of development, always paying a profit, though its production previous to the nineteenth century was comparatively small. Up to that time mercury was principally used for the making of vermilion, but in 1557 its property of amalgamating with the precious metals was discovered, and this created a largely increased demand.

The Almaden mine is the most perfect deposit of cinnabar, or perhaps of any other metal, ever discovered; consisting of three parallel veins about 100 feet equi-distant, penetrating the earth almost perpendicularly, growing richer and wider in metal as they descend, the deposit at 1,000 feet depth being richer than at any point above. For the last twelve years the average yield of mercury in the ore has been 9 per cent.; for the last two years 10.50 per cent. The Idria mine, in Southern Austria, was discovered at the close of the fifteenth century. Next to the Almaden this is the richest mine now worked, the bottom of the lode showing no diminution either in the quantity or quality of yield. Its reserves of ore are estimated to be equal to 900,000 flasks. The New Almaden mine in America is situated about thirteen miles from San José, California, at an elevation of 1,700 feet above the sea, in a low range of hills. The quicksilver deposits of California are characterised by a great and persistent irregularity, so that it makes the mining of these ores much more difficult than that of other metals. It has often occurred in the history of the mine that there was no ore in sight, and it looked as though the works must be shut down, and it has only been by the most careful prospecting that it has been possible to keep up the production. Very frequently large bodies of ore will almost completely run out, and there will be visible in the face of the works only a slight coloration in the vein matter which indicates that there is any ore left in that particular place, and by following out this little string of ore very carefully it may lead into a large deposit. From the commencement of the working of this mine up till 1870 the results were very unsatisfactory, and in the year named it seemed as if the company, which had in the meantime contracted an indebtedness of about 300,000%, would collapse, but by a supreme effort another 40,000% was raised, and the expenditure of this led to the discovery of paying deposits.

## MARRIAGE.

**CLARK—GRIFFITHS.**—On April 17, at St. Gregory's Church, Norwich, by the Rev. Canon E. S. Medley, John Jeffery Clark, chemist, Nottingham, eldest son of the late William Henry Clark, of Sevenoaks, to Helen Vincent, eldest daughter of John Robert Griffiths, of Norwich.

## DEATHS.

**BULLUS.**—On April 3, Mr. John Bullus, chemist and druggist, High Street, West Bromwich. Aged 54.

**HAMILTON.**—On April 16, at 32 Castle Terrace, Edinburgh, Mr. Robert Hamilton, homœopathic chemist, late of Whitby, Yorkshire. Aged 38. Mr. Hamilton was for some years principal assistant to Mr. J. C. Pottage, of Edinburgh, and has latterly been in business on his own account in that city.

**SCOTT.**—On April 8, Mr. John Scott, chemist and druggist, Farnworth, Lancashire. Aged 76.

**SMITH.**—On April 14, Mr. William Smith, chemist and druggist, Friargate, Preston. Aged 71.

**THRELFALL.**—On April 16, at his residence, 19 Belmont Drive, John Hurley Threlfall. Aged 97. Mr. Threlfall was in business as a chemist and druggist for some years at Prescott, afterwards removing to the Isle of Man. For many years he has lived in retirement at the above address, retaining all his faculties well to the last. Only a short time before his death he could read a newspaper without the aid of spectacles. During his early years of business he had an apprentice who ultimately became Lord Mayor of London; and in that position he found out his old master, invited him to the Mansion House, and treated him right royally.

**VAUGHAN.**—On April 1, Mr. William George Vaughan, chemist and druggist, Compton Street, London. Aged 43.

**WEBSTER.**—On April 3, Mr. Samuel Mather Webster, pharmaceutical chemist, Bridge Street, Warrington. Aged 73.

**WRIGHT.**—On March 31, Mr. William Wright, chemist and druggist, High Street, Burton-on-Trent. Aged 78. Mr. Wright represented Messrs. Wyleys, of Coventry, for twenty-seven years.



## NEW COMPANIES.

**CLARKE'S PYRAMID AND FAIRY LIGHT COMPANY (LIMITED).**—Capital, 50,000*l.* in 10*l.* shares; object, to acquire and carry on as successors to S. Clarke, of the Pyramid and Fairy Light Works, Cricklewood, the business now carried on there with the goodwill, patent and other rights, trademarks, and assets of the same. The first subscribers are:—S. Clarke, 73 Avenue Road, N.W.; T. M. Clarke, 73 Avenue Road, N.W.; Miss Clarke, 73 Avenue Road, N.W.; S. B. Clarke, 73 Avenue Road, N.W.; H. Clarke, 73 Avenue Road, N.W.; Miss L. Clarke, 73 Avenue Road, N.W.; Miss E. Clarke, 73 Avenue Road, N.W. The number of directors is to be three. Qualification, 1,000*l.* stock. The first are S. Clarke, S. B. Clarke, and H. Clarke.

**ARTHUR'S IDEAL SOAPWORKS (LIMITED).**—Registered with a capital of 120,000*l.* in 1*l.* shares. Object, to acquire leasehold premises in Neate Street, Camberwell, known as the Albany Soapworks, and the business now carried on there, and the goodwill thereof, and the machinery, stock, plant, materials, and tools appertaining thereto, and English and foreign patents, trade-marks, and designs, and the trade secrets now used in connection with the said business. The first subscribers are:—J. Sturzenegger, 20 Trump Street, Cheapside; J. Crowther, Neate Street, Camberwell; E. Salter, 3 Powis Villas, Croydon; H. G. Were, 11 Yew Tree Road, Edgbaston; C. F. Williams, 49 and 50 Milton Street, E.C.; C. Scales, 316 Albany Road, S.E.; F. F. Darby, 30 Monkhouse Avenue, Walthamstow. The number of directors is to be not less than three nor more than seven: the first to be appointed by the subscribers to the memorandum of association. Qualification, 250*l.* stock. Remuneration, chairman, 5*l.* 5*s.*, other directors 2*l.* 2*s.*, for each board attendance.

The *Financial News* of last Saturday refers as follows to this company, the prospectus of which has been largely advertised:—"Who Arthur is nobody knows, but the public will probably be quite unanimous that his Ideal is not theirs. Murley's soapworks last May were included in a scheme to amalgamate three soapworks, one fairly substantial and the others very small, the share of 20,000*l.* of purchase money set apart for Murley's concern being only 650*l.* in shares. The United Soap and Perfumery Manufacturers (Limited) never came before the public; but the 650*l.* worth is now offered as 'Arthur's Ideal' to the public for 120,000*l.* Mr. Crowther, who is to be managing director of Arthur's Ideal, was manager of the Lion Soapworks at Bradford for some time; but afterwards he became traveller for a confectionery business, and it was, perhaps, in that vocation that he acquired his appetite for 'sugar,' and his ambition to figure as a promoter, and in that line to 'take the cake.' His heart seems to have hankered after soap all the time, for when the Murley concern was put up by a firm of auctioneers in Finchurch Street, he bought it for 1,000*l.*, or less, and now offers it for 120,000*l.* Mr. Crowther has an adamantine check, but it will not serve him this time. In his eagerness to grow rich in a hurry, he has overshot the mark, and he has overestimated the gullibility of the public. His soap scheme will not wash, and Mr. Crowther may consider himself lucky if he suffers nothing worse than a loss of his time and money as a result of his first grand effort in the company-promoting line."

**PROFESSOR TICHBORNE**, of Dublin, has recently described in the *Chemical News* his method for preparing nitrogen. It is thus:—Mix 10 grammes of ammonium sulphate and 10 grammes of sodium nitrite in a  $\frac{1}{2}$  litre retort with 40 c.c. of glycerin and 60 c.c. of water. Place the retort with the neck elevated to an angle of about 40°, so that the water may condense and fall back into the retort. A bent tube is fitted with a cork into the neck, and conducts the gas into a wash-bottle; or it may be collected at once for general purposes without washing. Heat is applied directly to the retort, and the disengagement of free nitrogen begins at a temperature a few degrees below the boiling-point of water. It steadily but rapidly proceeds, and a gentle heat keeps up the disengagement of gas until the nitrite is all decomposed.

## Personalities.

**MR. ELLIS JAMES**, from Messrs. Giles, Schacht & Co., Clifton, has taken the business of Mr. N. Webb, of Calne, Wiltshire.

A SHOP for the sale of drugs, &c., is being opened at 142 Cheetham Hill Road, Manchester, by Mr. James C. Kidd.

**MR. WILLIAM COLE**, insect-powder manufacturer, of Ilfracombe, has been returned at the head of the poll for the Local Board of Health.

**MESSRS. J. E. LOCKYER & Co.** have acquired the business at 70 Royal Hill, Greenwich, carried on for forty-five years by Mr. George Howard, who is now retiring.

**MR. JOHN T. WINDLE**, chemist, of Chesterfield, who has held the office of vicar's churchwarden for the past nine years, was again nominated to the position at the Easter vestry meeting on Tuesday.

**THE ROYAL SOCIETY** annually elects fifteen new fellows. This year there is an unusually large number of applicants for the honour of fellowship, and the following fifteen have been selected:—John Aitkin, of Falkirk, N.B., the author of several papers regarding the relations of fog and dust in air; Edward Ballard, M.D., physician in H.M. Civil Service; Alfred B. Basset, M.A., barrister-at-law, an authority on hydrodynamics; Horace T. Brown, F.C.S., &c., brewer; Latimer Clark, C.E., &c., electrical engineer; Surgeon-Major D. D. Cunningham, M.B., C.M., Professor of Physiology, Medical College, Calcutta; Lazarus Fletcher, M.A., President Mineralogical Society; William B. Hemsley, A.L.S., Herbarium, Kew Gardens; C. T. Hudson, M.A., LL.D., Pres. R.M.S.; Thomas M. Hughes, M.A., Woodwardian Professor of Geology, Cambridge; E. B. Poulton, M.A., Lecturer on Natural Science, Jesus College, Oxford; W. J. Sollas, D.Sc., Professor of Geology, Dublin University; Charles Todd, M.A., Postmaster-General of South Australia; Herbert Tomlinson, B.A., Demonstrator of Natural Philosophy, King's College, London; and Gerald F. Yeo, M.D., Professor of Physiology, King's College, London. The following are amongst the medical men and chemists who have not been selected:—Sir C. A. Cameron, Professor D. J. Cunningham (Trin. Coll., Dublin), Drs. T. Buzzard, W. H. Corfield, W. H. Dickinson, J. Dreschfeld, W. M. Ord, J. Ross, G. Thin, T. Stevenson, C. Meymott Tidy, and J. Bland Sutton.

**ENGLISH, QUITE ENGLISH, Y'KNOW.**—Some of us in this country declaim with loud voice against the use of German and American medicines; but perhaps few of the grumblers ever pause to think of the protests in Germany and the United States against English medicines. Said one American grumbler lately, "When proprietaries come with *inc, oid, or* any tail to their name, set them back gently, know what they really are, and show them up in their true light." This has not come from a West-end of London square, but from a Western American State.

**JEYES' DISINFECTING FLUID** has been adopted by the Préfecture de la Seine for the disinfection of the Paris Cattle Market. Carbolic acid was employed last year, but according to an official report issued by the "Préfecture" it "was incapable of easy dilution; it left the ground greasy, and gave rise to complaint that it made it dangerous for the animals to move about. It also made dark stains upon the pavement, and owing to the impossibility of making a perfect mixture of the carbolic acid with water, it produced a very irregular distribution, which, under certain circumstances, might prove dangerous to the animals. Its odour prevented its employment in the stables, and it was only used in the passages and selling sheds. This disinfectant has been replaced by cresyl (Jeyes' fluid). Whilst carbolic acid gives out a permanent odour, which may perhaps dominate and mask other odours which it may be desired to destroy, cresyl carries away the odour which it is desired to dissipate, and in two hours after its use no odour whatever is left, that of the cresyl itself disappearing with that which it is called upon to combat."



BRITISH AND FOREIGN CONSULS' REPORTS.

ARGENTINE REPUBLIC.

*The Drug Trade in Rosario.* According to the French consul Rosario is, next to Buenos Ayres, the most important trade centre of the Republic. The tonnage of foreign vessels visiting the port has increased from 171,912 in 1880 to 1,032,783 in 1887. In that year the imports of prepared medicines were valued at 304,075f., of perfumery at 121,095f., and of raw drugs and chemicals at 877,085f. The imports of perfumery have increased eleven-fold since 1880. Two-thirds of the whole is French perfumery. France also furnishes nearly one-third of the medicines, almost all patents, and about one-fourth of the chemicals. Yet there is not one single French drug-house in the town, the whole of that trade being in the hands of English, Swiss, Italian, and Spanish firms.

CHINA.

*Insect Wax.* The steamer export of white wax (not bleached bees' wax, but the insect wax produced by the *Coccus Pe-la*) has increased greatly, writes the British Consul at Ichang. This curious and beautiful substance, though widely used in China, known to science, and repeatedly noticed in books on China, seems to be unfamiliar in our home market. Its dearness has been against it, but the price has gone down greatly. According to my information, the price at Kia-ting Fu (in Sze-ch'wan, on the Min River, some 700 miles up river from Ichang) has lately been about 1s. per lb. avoirdupois. At Ichang there is at present no wholesale market for the article, but the wholesale cost, as got for local consumption, is stated at about 1s. 3d. per lb. Allowing for duty, freight, commissions, &c., the article might be placed on the home market at about 1s. 6d. per lb. In view of its beauty, hardness, and high melting-point, it might be acceptable in the candle manufacture, to serve as a coating, or otherwise.

*Drug Exports.* The following are the exports of drugs from Ichang, one of the principal centres in the interior, during the last two years:—

Articles	1887		1888	
	Lbs.	Value £	Lbs.	Value £
Galls .. .. .	293,963	5,426	—	—
Medicines .. .. .	—	63,045	1,978,363	47,794
Musk .. .. .	2,900	53,469	1,480	19,686
Rhubarb .. .. .	205,165	9,442	320,291	14,556
Safflower .. .. .	111,208	12,302	73,913	8,314
Wax (Insect) .. .. .	1,541,305	125,039	942,595	87,790

SIAM.

*Pepper.* Pepper is produced in the province of Chantabon, on the east coast of the gulf of Siam, where its culture is conducted by a large number of small planters, mostly Chinese. In 1887 1576 tons were exported, in addition to which the local consumption of the spice is considerable. About 20 per cent. of the whole, mostly white pepper, is sent to China, the remainder to Singapore for re-export to Europe.

*Cardamoms.* The consumption of Siam cardamoms appears confined to Indo-China and China, to which markets 236 tons were shipped in 1887. There are several varieties of this fruit, more or less esteemed according to the aromatic properties of their seed. The true cardamom from the Cambodia frontier is sold as high as 150 piastres per picul; but the bastard cardamom, which forms nearly the whole of the supply, is worth barely one-fifth of that amount.

*Gamboge.* The gamboge, as its name indicates, is found in the forests of Cambodia, and also in the eastern provinces of Siam. After collection it is usually melted down and run into bamboo moulds. The hardened gum then appears in the form of sticks of varying lengths, of a fine deep yellow colour, and run together in packets of five or six pipes. Since some years the quantity of this gum brought

to market has greatly diminished, its scarcity has increased the price, and given rise to adulteration by introducing during the melting process lead or other substances in the interior of the pipes. In 1887 19,800 balcs were exported.

*Gum Benjamin.* This gum, from the district bordering upon Tonquin, east of Luang-Prabang, is brought to the latter place by the Khas tribe, who exchange it for manufactured goods with the Chinese dealers. The latter, in their turn, take it to Nong-Kai, the terminal point of the trade road to the South, and from there, at great expense of carriage, to Korat, whence, by way of Saraboori and the Menam river, it is sent to Bangkok. In 1887 the exports amounted to 37,500 kilos., but it appears that shipments could be much more advantageously made by way of Saigon and by the Mekong river. If any French traders should penetrate from Tonquin to Luang-Prabang they will probably make gum benjamin one of their staple articles with the Laos country.

*Sticklac.* This gum comes from the north and from the Laos country, and is sold on the Bangkok market in the same condition in which it is gathered, i.e. with the branches on which it is gathered adhering to it; the same lac when finely broken and washed in hot water is called seed lac. There is always a ready sale for this article on the local markets, as the Siamese dyers, who use it in their industry, compete for its acquisition with the export merchants.

SPANISH POSSESSIONS.

*Perfumery for Manila.* In the Philippine Islands Florida water sells in large quantities, and the familiar bottles and labels may be seen on the shelves of every drug, dry goods, and fancy store in Manila. Allow a Chinese pedler to open his pack at your door and it is highly probable that the first thing he will produce will be a bottle of Florida water. Eau de Cologne, toilet waters, and numerous varieties of perfumes have large sales among the foreigners, and there are two quite large stores in Manila devoted almost exclusively to the sale of that class of goods, while several of the drug stores carry quite large stocks. The majority of the people seem to have a passion for fragrant odours, and not only perfume their clothing liberally, but burn sweet-smelling gums, woods, and leaves in their homes, filling the air about them with delightful fragrance.

*Ylang-ylang.* Large quantities of ylang-ylang are exported, but it is an exceedingly small percentage of what might be shipped. Ylang-ylang, it is asserted, is peculiar to these islands, and is found nowhere else. The fragrant blossoms are hawked about the streets of Manila in large bamboo trays by native women, who sell them by the handful to ladies and gentlemen who desire to perfume their trunks and wardrobes. There are quite a number of other aromatic blossoms, leaves, and roots used for similar purposes, which grow in profusion in the interior, and are sold about the streets in small quantities. Fragrant woods, herbs, and gums, and medicinal plants and trees grow profusely, but no one pays any attention to them, except the natives, who gather small quantities and sell them as their necessities prompt.

*Patent Medicines.* A few patent medicines, notably Jaynes' Holloway's, and "Mother Seigel's Syrup," were formerly sold quite largely in Manila, but can come there no more unless the manufacturers consent to comply with the provisions of a decree issued in July, 1888, which requires that the formula by which patent medicines are made shall be printed on the outside wrapper of each package, so that it can easily be read by all purchasers. This is considered by local druggists as an effectual bar to the entry of all patent medicines, as it is not probable that the manufacturers will consent to make public their formula except in very rare cases. When the supplies on hand are exhausted the medicine-takers will have to find new remedies for their ailments or give up being sick.

ROCHE'S embrocation is said to consist of 2½ parts of asafoetida digested in 60 parts of olive oil. After standing some hours decant and mix with 2 parts each of oil of caraway and turpentine, and a few drops of oil of wintergreen.



## THE PLACE OF LANOLIN IN PHARMACY.

By H. HELBING.

WHEN lanolin was first introduced into medicine about four years ago, it could not be said to be free from objections in respect to colour and odour, and the indisputable claims which it has possessed for some time to favour and use have been seriously affected by the impressions which it made at that time upon medical men; so that the prejudice once created against it when its manufacture had not been perfected is not yet shaken off, though an unexceptionable product has long taken the place of the first more or less crude output. Moreover a number of substitutes and mixtures under a variety of fantastic names have been introduced by manufacturers, which cannot be said to be at all equal in their properties to lanolin. The only reliable—and, indeed, the only lanolin proper—is that of Liebreich, and pharmacists should not accept any other preparation as a substitute. If all buyers avail themselves of this easily-followed advice tests for purity become unnecessary.

The great progress which has been made in all directions in which the manufacture of medicaments is involved has not been better observed than in the case of lanolin. What is commonly known as “lanolin” consists of that substance truly so called with 23 per cent. of water. Pure or anhydrous lanolin is a pale yellowish tenacious substance, translucent in thin layers and melting to a clear liquid without the slightest acid or unpleasant smell. These products have not yet been sufficiently used in this country by medical men or by pharmacists, and it may therefore be suitable and timely to point out its principal advantages.

Lanolin is the only perfect substitute for all ointment bases in official and in non-official preparations. Its superior qualities may be summed up in four sentences:—

1. It never turns rancid.
2. It does not exert the slightest irritating effect on the tenderest skin, and it rapidly penetrates the tissues, leaving no trace of a fatty nature.
3. It can be mixed with any proportion of fats or oils, with glycerine or with paraffin. It can be mixed with more than its own weight of water.
4. It is a-septic; no germs or microbes can live in it, as is the case with glycerine fats and oils.

This latter point was proved by the researches of Gottstein, who compared lanolin with other ointment bases as culture media for microbes. The effect of these latter in deteriorating the activity of medicaments and in irritating the skin is well known. Lanolin in itself is of somewhat too sticky a nature to be used *per se*, but it may be used as an ointment base by the addition of certain proportions of other substances. This ointment base I shall name *Unguentum lanolini*, and the formula for its preparation is as follows:—

Anhydrous lanolin..	..	..	..	65 parts
Liquid paraffin	..	..	..	30 „
Ceresin	..	..	..	5 „

Melt together and then beat or knead in

Water..	..	..	..	..	30 „
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This ungt. lanolini is applicable as a substitute for lard, or for any other substance used for similar purposes, and its adaptability for employment in the place of the old ointment bases is testified and proved by the papers recently contributed to the literature of the subject by various medical men who have experienced its advantages or observed any new features in its application. To show that lard and paraffin are not suitable substances to be used alone as ointment bases does not require much argument. The difficulty of getting lard which, in the first place, is free from rancidity needs no emphasis, and even if it be obtained in a fairly pure condition it rapidly undergoes change when stocked, and much more so when mixed with various ingredients to form the official ointments, &c. As an instance the ointment of belladonna may be cited, which so often becomes crowded with fungoid growths. Generally for this reason it is only prepared as required, and the pharmacopœias recognising the proneness of the ointment to such deterioration, order it to

be made with benzoated lard—an improvement more evident in theory than in practice.

Anyone who has ever prepared the ointment of potassium iodide knows how difficult, if not impossible, it is to keep it. Do what we will, it always changes colour finally. This has led the revisers of some pharmacopœias to substitute the lard by paraffins. But it is well known that these bases are by no means so harmless as was at first supposed.

It is now almost universally recognised that vaseline and other varieties of soft paraffin do not favour the absorption of medicaments by the skin. Ointment of potassium iodide with a soft paraffin basis is exceedingly difficult to make. The salt must be dissolved in water, and soft paraffin is a substance with which an aqueous solution is perfectly non-miscible; at best only a kind of emulsion can be formed, and even that only by the exercise of considerable skill and patience, independent of the addition of something to facilitate the process. It is a most questionable practice with some pharmacists to aid the combination of the ingredients by the addition of a little tragacanth or soap, which cannot fail to have an irritating effect upon the skin. Although it strikes the merest tyro in pharmacy that ung. potas. iod. is neither a stable nor a satisfactory preparation made with lard or with soft paraffin, no one in this country up to the present seems to have thought of abandoning these for lanolin as a base for the preparation. This is probably to a certain extent due to the fact that editors of pharmacopœias and medical men think that it is only suitable for use in a few special combinations, and not for general introduction as an ointment base.

Turning, now, to the consideration of mercurial ointment. In the preparation of this it is generally the custom to use suet in order to get it to the right consistence. The consequence of this is that the patient who rubs in the ointment is redolent of that particular kind of grease, which not only smells unpleasantly in itself, but is also suggestive of disagreeable associations. Mercurial ointment also is always greasy and in no way fit to be called plastic. All specialists who have had any experience of the continued use of this ointment have come to the conclusion that there is no better ointment in point of smoothness and readiness of absorption than one made with lanolin, and patients who have had the opportunity of applying both are quick to discover the difference and prefer the latter.

In all pharmaceutical preparations efforts have been successfully made to introduce improvements on the crude condition in which we obtain the materials from Nature; but in the matter of ointment bases we still use to-day the more or less purified fat of the hog, which was the favourite material centuries ago, although it has been repeatedly proved that the base itself is liable to change, which is often accompanied by alterations in the constitution and properties of the medicinal agents mixed with it.

For some special applications the anhydrous lanolin is preferable, as has been proved by therapeutic experiments; one of these special cases is in the preparation of eye ointments. For this purpose ungt. lanolini may be used without the addition of water. The following B.P. ointments may preferably be prepared with anhydrous ungt. lanolini:—

Unguentum aconitinæ	Unguentum iodi
„ antimon. tartarat.	„ zinci
„ cantharidis	„ oleati
„ hydrargyri oxid. rubri	„ potass. iodid.

All other official ointments may be prepared in the same way by using lanolin in place of the official ointment bases. The process of manufacture would be in no way affected by the change, except that most of the ointments would be more readily prepared. The superiority of lanolin is being recognised not only, however, in pharmacy, but also for toilet purposes and for preserving the skin. It is a natural skin-fat, and, as roughness, swelling, and excoriations of that structure are believed to be due to a deficiency of that epithelial fat in the epidermis which gives it its suppleness, nothing can be better in those abnormal conditions than the application of lanolin; and for this reason it is preferable to all other fats in the preparation of cosmetics. Dr. Meyer, writing of the difficulties which surgeons experience in keeping the skin of the hands healthy and free from roughness and dryness—conditions which are brought about by the frequent use of solutions of corrosive sublimate and carbolic



acid—says that nothing is better for overcoming them than the application of lanolin. His original formula is:—

Lanolin .. .. .	2 oz.
Vanillin .. .	2 grs.
Otto of rose .. .	1 drop.

A softer application may be made by mixing

Lanolin .. .. .	4 oz.
Liquid paraffin .. .	1 "
Vanillin .. .	2 grs.
Otto of rose .. .	1 drop.

This is put into collapsible tubes. As these preparations are found to be suitable for medical men they would doubtless also be found valuable to the general public for application in winter to protect the skin against the effects of cold winds. The addition of traces of vanillin is not objectionable, and it makes the preparation very agreeable. Lanolin combinations for use as cosmetics should always contain 1 grain of vanillin in about 2 oz.; the same addition may also be quite safely made to ointments intended to be medically applied.

Another new combination of lanolin is "sapolanolin"—a preparation for use in acne, eczemas, &c. This is prepared, according to Dr. Stern, as follows:—

Lanolin .. .. .	2½ parts.
Soft soap .. .. .	2 "

Mix.

A third new feature is the use of lanolin as a kind of urethral injection. The formula used is:—

Sulphate of zinc .. .. .	10 grs.
Water .. .. .	2 drms.

Dissolve and add—

Anhydrous lanolin .. .. .	5 drms.
Almond oil .. .. .	3 oz.

Recently lanolin has been recommended as a pill excipient for potassium permanganate, and I can confirm Mr. Miller's statement that it makes an excellent mass, and does not decompose or reduce the salt. Lanolin may probably be found useful for other pill-masses, and, as to its use in therapeutics generally, it is to be hoped that the various pharmacopœia committees will make the necessary trials with lanolin in view of its introduction into the pharmacopœias.

## ON IODATE OF CALCIUM AS A DISINFECTANT.

By DR. KLEIN, F.R.S.\*

**I**ODATE OF CALCIUM was brought under my notice in 1887 by Mr. Weaver, C.E., as a disinfectant of uncommon value. Though expensive, as compared with so-called disinfectants in common use, iodate of calcium is a perfectly innocuous substance. Provided, therefore, that it be found really efficient, and that it can be manufactured in abundance at a reasonable price, a use may be found for this iodate as a disinfectant.

Some preliminary experiments which I made with the iodate proved that, besides being harmless to the human system,† it certainly has considerable disinfecting properties—properties which place it above carbolic acid, permanganate of potash, and phenylpropionic and phenylacetic acids. I therefore commenced a series of systematic experiments to test more accurately its restraining and its killing power as regards microbes.

Having prepared a strong solution of the salt, 1 part of the iodate to 500 parts of water, as a stock solution, my method of procedure was the same as that adopted in former and somewhat similar experiments, described in the Reports of the Medical Officer for the several years 1883 to 1886. The restraining power of iodate of calcium, although greatly superior to that of carbolic acid, and of phenylpropionic and

phenylacetic acids, is nevertheless considerably inferior to that of perchloride of mercury.

As I have shown in last year's report, perchloride of mercury and nutritive gelatine solution of a mercurial strength of 1 in 40,000, has upon most samples of bacillus anthracis some sort of inimical influence; and in an earlier report I have shown that a similar mixture of a strength of 1 in 20,000 has commonly a decided restraining power on this as on most pathogenic organisms.

My recent experiments with iodate of calcium have accordingly proceeded on the plan of passing by successive steps from weak to stronger solutions of the disinfectant in gelatine. They were made upon (a) anthrax spores; (b) sporeless anthrax of cultivation; (c) sporeless anthrax of blood; (d) cultivation of bacillus of swine erysipelas; (e) cultivation of bacillus of swine fever.

(1) A series of gelatine tubes containing calcium iodate in the proportion of 1 iodate in 40,000 gelatine, along with other (control) tubes containing normal unmedicated gelatine, were simultaneously inoculated with the above several organisms. After several days' growth in the incubator no restraining power was noticed in any of the medicated tubes; and inoculation experiments made on animals (in the case of anthrax on guinea-pigs, in the case of swine erysipelas and swine fever on mice) with growth from medicated and from non-medicated tubes, were equally efficient in inducing the diseases.

(2) A series of tubes of medicated gelatine, 1 in 20,000 (1 iodate of calcium to 20,000 gelatine) was next inoculated together with control tubes as before. And with like result; no restraining power, and no loss of virulence.

(3) A series of tubes of medicated gelatine, 1 in 10,000, was then similarly inoculated, and control tubes as well. The result was again negative. Anthrax spores germinated well in the tubes in the usual time; and bacillus anthracis of cultures and of blood produced there typical and normal growths. So did also the bacillus of swine erysipelas and the bacillus of swine fever. The action of these growths was in turn tested on animals, and the virulence of the contained organisms was found to be unimpaired.

(4) A series of tubes of medicated gelatine, 1 in 6,000, was next taken for inoculation, and in these tubes were noticed the first signs of a restraining power of the iodate. There was growth in all the medicated tubes, but the growth was retarded and smaller in amount than in the control tubes. The virulence of the growths was not, however, much impaired in the few experiments on animals that I was able to make. The most that could be said was that death was somewhat delayed.

So far, then, as restraining power is concerned, iodate of calcium is a much less powerful disinfectant than perchloride of mercury. And its inferiority to the mercury salt was further proved by experiments upon rodents.

*The Killing Power of Iodate of Calcium.*—With strong solution of iodate of calcium (1 in 500), I mixed thoroughly virulent anthrax blood in the proportion of one drop with half a watch glass (about 100 drops) of the iodate solution; and with several drops of this mixture I inoculated three guinea-pigs. No. 1 after the mixture had stood five minutes, No. 2 after ten minutes, and No. 3 after fifteen minutes. All three animals had the next day local œdema at the seat of inoculation—a sure sign of anthrax infection—and on the following day, *i.e.*, within forty-eight hours, were found dead of typical anthrax, with enormous œdematous swelling all along the abdomen and thorax.

Later, strong solution of calcium iodate (1 in 500) was kept mixed in similar fashion with virulent anthrax blood for thirty minutes and sixty minutes respectively. Guinea-pig No. 5 was then inoculated with several drops of the former, and guinea-pig No. 6 with a like quantity of the latter, solution. Both animals died of typical anthrax, guinea-pig No. 5 during the second, guinea-pig No. 6 during the third day after inoculation.

I have also tested the disinfecting power of this strong solution of iodate of calcium (1 in 500) on cholera comma-bacillus of Koch, and have found that it has no power to arrest the movement, *i.e.* the life of these comma-bacilli. A mere trace of a culture of the comma-bacillus was added to a comparatively large quantity—several drops—of the strong solution, and the comma-bacilli in this mixture were watched under the microscope. They, however, appeared perfectly

\* From the Report of the Medical Officer of the Local Government Board.

† Doses of 1 to 2 grains administered to adults several times daily and for several successive days produced no physiological effect, except that presence of iodide was demonstrable in the saliva.



impaired in their mobility. Inoculation of gelatine with materials from this medicated mixture yielded typical normal culture of the comma-bacilli.

Thus it is seen that while a solution of perchloride of mercury in water of the strength of 1 part mercury in 5,000 kills the (sporeless) bacillus anthracis of the blood, iodate of calcium of ten times that strength (1 in 500) is incapable of doing so. But iodate of calcium, though inferior to perchloride of mercury in disinfecting power, has nevertheless, as I have pointed out in the introduction to this report, the advantage of being quite innocuous when swallowed with food or drink.

There remains to be determined the amount of time required after admixture of a solution of iodate of calcium of, say, 1 in 1,000, with a given fluid, for destruction of the life of one or another organism contained in it. This is a very wide question, since every species would have to be tested separately on account of their very various powers of resistance—as, indeed, has been abundantly illustrated in former reports in connection with the testing of other disinfectants.

### ANALYTICAL AND GALENICAL NOTES FOR PHARMACISTS.

THE *Helfenberger Annalen* for 1888, which has just reached us, is larger and even more interesting than usual. The *Annalen*, we may explain, is compiled under the direction of Mr. Eugen Dieterich, manufacturer of pharmaceutical and other chemicals, who occupies a position in Germany somewhat similar to the Howards in this country. The *Annalen* is essentially a record of the work done in the Helfenberg laboratories during last year, so far as it can be made known without revealing the secrets of the factory, and in some respects it shows the progress of analytical processes generally during the year, while it also indicates the quality of the more important articles which have been examined in the laboratories. It is not our purpose to enter now into a full reproduction of the details of the *Annalen*;<sup>\*</sup> we simply epitomise the more important chapters and give the principal facts which the results bring out.

**Extracts.**—For judging the value of medicinal extracts the factors which are taken into account are the percentages of dry matter, ash (including potassium carbonate), free acid, and alkaloid, where the latter exists. For dry matter and ash, following the suggestions of G. Kassner, Dieterich recommends a flat platinum basin to be used, about 2 centimetres high and 5 centimetres in diameter. For dry matter 3 grammes of the extract should be exposed to a temperature of 100° C. for three hours. The residue may be used for the ash, but it should be carefully scraped from the sides and bottom of the dish. The source of heat should be a spirit-lamp rather than a gas-flame. Heat the residue carefully until the distillation products are given off and the contents of the dish begin to burn; when this is the case remove the flame until the organic matter ceases to burn. An intense heat may then be applied. For the estimation of free acid 3 grammes of the extract are dissolved in 30 grammes of distilled water, and titrated with semi-normal ammonia solution. The end-point is noted by touching a piece of red litmus paper with a drop of the mixture. Red litmus is capable of detecting 1 part of ammonia in 40,000. Alkaloids are, in the case of extracts of aconite, belladonna, conium, and henbane, estimated as follows:—Dissolve 2 grammes of the extract in 3 grammes of distilled water, add 10 grammes of marble lime, and pack into a continuous extraction apparatus which has 2 centimetres of cotton wool at the bottom. The boiling-flask should be of 150 to 200 c.c. capacity, and 30 grammes of ether should be put into it, which is sufficient for the exhaustion. Thirty to forty minutes suffice for aconite, belladonna, and henbane, but it requires two hours to exhaust conium extract, using Barthel's extraction apparatus, which is provided with a triple-tube condenser. At the end of the percolation the flask should be washed out twice or three times with a little

ether, and finally with 1 c.c. of distilled water. The percolate should then be carefully evaporated at a temperature not exceeding 30° C., until the residue weighs 1.5 grammes. To this add 0.5 c.c. of proof spirit, 10 c.c. of distilled water, and a few drops of logwood tincture (1 in 20 of spirit). Titrate with centi-normal sulphuric acid. Each c.c. of the standard acid is equal to 0.00289 gramme of atropine, 0.00289 of hyoscyamine, 0.00533 of aconitine, and 0.00127 of cocaine. Extract of nux vomica may be assayed in the same way, but only 1 gramme of the extract is used, and the alkaloidal residue is titrated with  $\frac{N}{20}$  sulphuric acid, each c.c. of which is equal to 0.0182 gramme of mixed alkaloids (strychnine and brucine). The following are some of the analytical results obtained with German extracts. The German green extracts differ from the British in being spirituous, but the others are prepared in a very similar manner to ours; opium, rhubarb, and nux vomica are *dry* extracts:—

	Moisture per cent.	Ash, per cent.	K <sub>2</sub> CO <sub>3</sub> in 100 Ash	Alkaloid, per cent.
Aconite .. ..	18.73-22.4	2.56-3.33	48.35-53.08	1.25-1.6
Belladonna ..	19-26.85	14-21.73	46-75.2	1.15-1.33
Cannabis Indica ..	5.93-13.06	0.26-67	Trace-10.3	—
Gentian .. ..	12.5-23.7	2.23-4.76	13.03-41.7	—
Henbane .. ..	14.5-19.7	18.74-23.93	34.36-51.66	0.72-1.4
Nux vomica ..	0.46-2.83	2.6-8.6	15.47-28.22	15.47-19.7
Opium .. ..	2.2-10.06	6.16-6.6	3.52-6.60	22.6-26.2
Rhubarb .. ..	1.36-7.73	4.43-5.33	37.86-51.47	—
Taraxacum ..	18.2-20.7	9.5-21	21.9-36.43	—

The varying percentage of potassium in the ash is a noteworthy feature, and might be an important analytical factor if carefully followed up.

**Extract of Malt.**—The report contains several interesting items regarding extract of malt, chief of which is the following table regarding the composition of extracts made from malted cereals and leguminous seeds, the figures indicating the percentage composition:—

Malt	Maltose	Dextrin	Albumen	Free Acid	Mineral Matter	Phosphoric Acid	Water	Diastase		Extractive Matter, Gum, Fat, &c.
								Per cent.	1 part converted starch	
Barley ..	66.70	2.60	5.33	0.99	1.25	0.35	25.00	0.25	Parts	0.18
Rye ..	50.70	4.88	4.59	0.81	1.25	0.30	36.20	0.17	3.3	1.40
Oats ..	57.10	1.80	6.34	1.35	2.15	0.38	31.00	0.025	0.5	0.23
Wheat ..	62.70	3.32	6.56	0.81	1.15	0.28	24.45	0.018	0.33	0.99
Maize ..	70.80	4.54	2.62	0.81	1.35	0.42	16.50	0.018	0.33	3.36
Peas ..	52.80	4.16	8.75	1.89	3.10	0.78	26.70	—	—	2.60
Vetch ..	49.10	2.99	8.75	2.34	3.25	0.75	26.65	—	—	6.17
Lentils ..	50.05	5.04	8.21	2.07	2.95	0.70	24.15	—	—	7.53
Bean ..	33.10	3.65	4.81	1.71	3.05	0.78	42.60	—	—	6.08

The free acid was determined volumetrically with semi-normal ammonia solution, using litmus paper as an indicator; 10 grammes of the extract are dissolved in 50 of water for this purpose. Albumen was determined by estimating the nitrogen by Kjeldahl's method, using 2 grammes of the extract. Maltose was estimated with Fehling's solution in the ordinary manner, a correction being made for the reducing action of dextrin. Several determinations were made to ensure correctness on this latter point, and it was found that 1 gramme of specially purified dextrin is equivalent to 1.3 per cent. of grape sugar when brought to the boil in aqueous solution, or 1.55 per cent. when boiled for five minutes, and 1.94 per cent. for fifteen minutes. The report enters minutely into a consideration of the methods for estimating dextrin (most of which are liable to error), and gives the following as the most reliable process:—Dissolve 5 grammes of the extract in 25 of water, add 400 of absolute alcohol, and after mixing well, set aside for twelve hours to allow the insoluble matter to settle. Then filter off the clear solution, wash the precipitate with a little alcohol, dissolve it in 60 grammes of water, boil the solution, filter, and make it up to 100 c.c. Use 50 c.c. of this for titration with Fehling's solution, the result giving maltose and dextrin, so far as it acts upon the Fehling; the other 50 c.c. is to be heated for three hours

<sup>\*</sup> Published by Julius Springer, publisher, Berlin, N., price 2 marks (2s.).



with 0.5 c.c. of hydrochloric acid on a water-bath, neutralised with soda solution and titrated with Fehling. The difference between the two titrations gives the amount of dextrin. For estimating the amount of diastase in the extract Dietrich uses Dunstan and Dimmock's method, and considers that 1 part of diastase will convert 2,000 parts of starch into sugar.

*Acetum Scillæ.*—The German Pharmacopœia preparation (1 in 10) is still made with spirit, and, according to the Pharmacopœia, should contain 5.1 per cent. of acetic acid. There is some difficulty in practice in getting this, and on investigation the following interesting figures were obtained with four samples, each made according to the official directions for eight days' maceration, pressure, and filtering:—

		Percentage of Acetic Acid			
		A	B	C	D
After Maceration	.. ..	5.10	5.10	5.16	5.16
" Pressure	.. ..	5.07	5.04	5.16	5.14
" Filtration	.. ..	5.07	4.98	5.10	5.04

*Lard* receives some attention in the *Annalen*, chiefly in reference to the physical characters and the adulterants, the latter including a review of the work of other observers. It is only necessary to quote here the physical characters which were determined with lard of the writer's own make:—Specific gravity at 15° C., 0.929 to 0.942 (average of eight samples, 0.9342); three of the samples gave 0.897, 0.895, and 0.892 at 90° C.; the melting-point was in five instances 44° C., and in three 43° C.; free acid amounted to 1.4 per cent. in two samples, and 1.1 per cent. in six, while the iodine absorption varied from 49 to 52 per cent., with an average of 50.8.

*Liquor Ferri Glycerinati.*—To prepare this 12.5 parts of 15 per cent. solution of caustic soda are mixed with 15 parts of glycerine and 72.5 parts of liquor ferri oxychlorati (dialysed iron, double strength), and the whole well shaken in a bottle.

#### AT THE COUNTER.

ADVANCED PHARMACY.—We hold *Meyers Bros.' Druggist* responsible for this:—Boy to druggist: "Want a boy?" Druggist: "Yes. Ever worked in a drug store?" Boy: "Yes, sir." Druggist: "What did you do?" Boy: "Bit holes in porous plasters." Rapid exit of boy, followed by a bottle of mucilage.

YOUTHFUL CUSTOMER: "A 'aporth o' potash and a 'aporth o' sulphur." Chemist: "We don't sell less than pennyworths of them." Youthful Customer: "Don't you?" Chemist: "No, we don't." Youthful Customer: "Then sell us a pen'orth o' potash, and gie me a bit o' sulphur." Sharp boy, that.

A CARDIFF subscriber sends us the following:—(1.) "Please for a 4½ Feeding Bottle, for a baby with a screw top." (2.) "I want a sixpenny pot of 'marmalade' for the hair." (Vaseline pomade found to be the thing required.)

THE following recipe was dispensed lately by Mr. Pritchard, of Cheadle, near Manchester:—1 Surpes of filetes, 1 Surpes of quilles, 1 eppercater.

TIME, 2 A.M. Scene in the States (but human nature is much the same at this side). The druggist is awakened by a wild pull at his night-bell. "Who is that?" he bawls. "I want 10 cents' worth of paregoric," replied a voice below. "I want you to understand that I don't open my store at night for 10 cents' worth of paregoric, except for a customer." "But I'm a customer." "I don't seem to know you." "Gracious goodness! I'm in your store three or four times a week to look at your directory."

THIS happened in the North. A leading pharmacist stands behind his counter; the uppermost thoughts are the modern tendencies of the craft, the philosophy of "cutting," and the possibility of combining it delicately with advanced pharmacy. Enter unregenerate youth of twelve summers.

"Tuppence worth o' thon things like tacks." Pharmacist: "Like tacks! what things like tacks?" U. Y.: "I dinna ken; they're juist like tacks." P.: "What are they for, my mannie?" U. Y.: "For blawin' the wind oot o' my grannic." P.: "Ah! cloves you mean."

"PHLOX" (12/125) has had orders for Spar my scaty and Scadless powders.

AN Essex chemist says: To-day I was asked for one pennyworth of "ex hollow cassicks." On asking what it was for I learned it was oxalic acid that was required.

A CORNISH QUERY.—"One pennyworth of cocoa nut sodder to go in bread." Sodii bicarb. required.

THE specimens which follow are taken from originals received in an agricultural district within forty miles of London, and sent for our inspection:—One customer asks for "4 penney worth of inceeck Pooder tie it up." "A sixpenny Bottle of Ididine of Bunions" is comprehensible if we substitute "for" for "of"; but how the chemist knew that "Kylatic Bark" meant cascarilla bark, he does not explain. Next gentleman thinks himself capable of writing a Latin prescription, which comes out as follows (quite innocent of such trifling details as quantities):—

	Ether Rect
	pott By Carb
	tineter of Levan
	Deoo
..	Ess. Viei
	Ether Snitt

He got something like it. English is good enough for the next comer, who sets out his wants thus:—

6 still droops	6 dragon
6 haira Pierai	blood
6 iron dust	
6 better app'e	
Pleas tie it up	

There must be a curious tendency among the chemists of the district to economise on their string. Here is a case for sympathy. The writer was a lady:—

SIR,—Will you please to send me some medicine for the wind for I have the wind so dreadfully that blows me up and really if I don't eat bit of anything I am just the same but I have no hapetite for food but if I try and eat a bit there is nothing but wind rolling up and down in my insides and stomach untill that poisons the whole of me and turns me so gaddy and affects the nerves of my head untill I have no nerve for nothing and it wout let my blood sureirelate I am always floze a co'd and I have the wind so at bedtime and that settles in the small of my back that I cannot turn in the bed so I hope Sir that you will try your best and send me something for it as my life is a misery to me.

We miss other letters of a similar character, but not so effectively stated as the above. And we pass by, too, the inevitable variations of ipecacuanha, hiera picra, and other drugs, with which we are all familiar. As novelties, we notice "watchet," and "squasher" for quassia, "neighter," "Hizeing Glass," "Maziliakem," "Oshazed," "Cener," and "Zofolat of zink." "Tincur of go kankham" is a good one, and so is the following order:—"Nipple shile 3d. of Suripubrab."

MAKING ANOTHER KOH-I-NOR: AN EASTERTIDE FANCY.—Young Lady Customer: "Have you Diamond dyes, please?" Pharmacist: "Yes, miss. What colour do you wish?" Young Lady Customer: "Diamond, please."

It takes a long time before some people recognise a thing. For example, M. Marty has just discovered that absolute chloroform decomposes on exposure to light, and he suggests that it should be kept in bottles of yellow glass, with ground-glass stoppers, which have been thoroughly cleaned and dried, and that one-thousandth part of its weight of absolute ethylic alcohol should be added to the chloroform.



## Practical Notes and Formulae.

### NASAL CATARRH.

A SOLUTION which has been found to act better than Dobell's solution for use in the atomiser, as well as for a nose wash in cases of acute coryza, is made as follows:—

Sodii bicarb...	..	..	..	3viij.
„ bibor. ..	..	..	..	3viij.
„ benzoat. ..	..	..	..	gr. xx.
„ salicylat. ..	..	..	..	„ xx.
Thymol ..	..	..	..	„ x.
Eucalyptol ..	..	..	..	„ x.
Menthol ..	..	..	..	„ v.
Ol. gaultheriæ ..	..	..	..	gtt. vj.
Glycerini ..	..	..	..	oz. viiiss.
Alcoholis ..	..	..	..	„ ij.
Aquæ ..	..	..	..	q.s. ad 3xvj.

Philadelphia druggists make the solid ingredients of this formula into a compressed tablet.—*Med. and Surg. Rep.*

### GILDING AND SILVERING PASTES.

				Grs.
Chloride of gold ..	..	..	..	36
Cyanide of potassium ..	..	..	..	60
Water 1 drachm, or sufficient.				

Dissolve the chloride in half the water, and the cyanide in the remainder, mix the two solutions, let stand fifteen minutes, and thicken the mixture to a paste with

				Grs.
Prepared chalk ..	..	..	..	100
Cream of tartar ..	..	..	..	5

Apply the paste to the surface to be gilded (which must be perfectly clean), let stand an hour, and polish with chamois. This is said to be an excellent preparation for any metallic surface except iron or steel, the coating with proper care lasting many months. For silver-plating the same formula may be used, substituting nitrate of silver for chloride of gold.—*Druggists' Circular.*

### SACHET MIXTURE.

Coriander ..	..	..	..	4 oz.
Orris root ..	..	..	..	4 „
Rose leaves ..	..	..	..	4 „
Lavender flowers ..	..	..	..	2 „
Mace ..	..	..	..	½ „
Cinnamon ..	..	..	..	½ „
Cloves ..	..	..	..	¼ „
Calamus ..	..	..	..	4 „
Tincture of musk ..	..	..	..	30 min.

Commintte the solids, sprinkle over them the tincture, and inclose in bags, which are to be well sewed.

### LACQUER FOR BRASS.

Turmeric, powdered ..	..	..	..	1 tr. oz.
Annatto, best ..	..	..	..	¼ „
Saffron, Spanish ..	..	..	..	¼ „
Shellac ..	..	..	..	3 „
Spirit ..	..	..	..	16 fl. oz.

Digest the first three ingredients with the alcohol for twenty-four hours, then dissolve the shellac in the liquid.

### EAU DE COLOGNE.

Oil of bergamot ..	..	..	..	630 min.
„ neroli ..	..	..	..	80 „
„ rose ..	..	..	..	60 „
Musk ..	..	..	..	10 gr.
Tincture of vanilla ..	..	..	..	120 min.
Extract of jasmin ..	..	..	..	630 „
„ violet ..	..	..	..	630 „
Triple-distilled spirit ..	..	..	..	112 fl. oz.
Water ..	..	..	..	10 „

Mix the oils and extracts with 104 oz. of the spirit; digest the musk with the remaining 8 oz. at a gentle heat, in a closed bottle, for twenty-four hours; then add to the other liquid, add the water, cool, and filter. If convenient, set aside for some weeks before filtering.

*American Druggist.*

### COLOURS FOR SHOW-BOTTLES.

THE *National Druggist* publishes a column of formulæ, but the only one which is strange to us is:—*Amber*.—Dissolve 1 part dragonsblood in 4 parts sulphuric acid, dilute with water to desired tint, and filter.

### BAY RUM.

(1)	Bay oil ..	..	..	..	2 drachms.
	Pimento oil ..	..	..	..	1 „
	Oil of cloves ..	..	..	..	10 drops
	Proof spirit ..	..	..	..	1 gallon

Mix, allow to stand for several days, and filter.

(2)	Bay oil ..	..	..	..	1 oz.
	Rectified spirit ..	..	..	..	½ gallon

Mix, allow to stand for two weeks, then add—

Good Jamaica rum ..	..	..	..	1 gallon
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### UNALTERABLE IODIDE OF POTASSIUM OINTMENT.

A FOREIGN pharmacist gives the following:—Iodide of potassium, white Venice soap, distilled water, of each, 100; glycerine, 600; fresh or benzoated lard, 300. Dissolve the iodide in the water (using a water-bath) and the soap; add the glycerine, and afterwards the lard. As soon as the lard has melted stir rapidly and continually, keeping the dish in cold water. The free alkali of the soap (initial and resulting from hydrolysis) is no doubt the preserving factor in this case.

### SEDATIVE POWDERS FOR CHILDREN.

A SEDATIVE powder, of German origin, which is said to be of great value in infantile disorders, teething, hoarseness, sore throat, restlessness, &c., is described under the suggestive name of “Bismarcksches Kinderpulver,” or “Pulvis antiphlogisticus infantum.” It consists of 8 parts of tannate of quinine, 1 part magnesia, 40 parts sugar, 10 parts of fennel-oil sugar, 2 parts liquorice in powder. It is given in half-teaspoonful doses, *pro re natâ*, in warm water.

### ANISE SOOTHING SYRUP.

DISSOLVE 30 drops of anise oil, 5 drops of oil of fennel, and 1 drop of oil of bitter almonds in 3¾ oz. of rectified spirit, and add to a mixture of simple syrup 7 fl. oz., and water 1¼ oz. Allow to stand 12 hours; mix with 3 drachms of purified Venetian talc and filter.

### SCHUTZE'S BLOOD-PURIFYING POWDER.

HAGER gives the following as the composition of this powder:—

				Parts
Dried Glanber salts ..	..	..	..	10
Dried Epsom salts ..	..	..	..	70
Common salt ..	..	..	..	15
Tartaric acid ..	..	..	..	15
Bicarbonate of soda ..	..	..	..	20

This mixture could be used as a substitute for Ofner bitter water.—*New Idea.*

### BORATED COCAINE COTTON FOR BURNS.

				Oz.
Solution of cocaine (2 p. c.) ..	..	..	..	30
Boric acid ..	..	..	..	2
Glycerine ..	..	..	..	4
Carbolic acid ..	..	..	..	1

Dissolve the acids in the glycerine, add to the solution of cocaine, and in the mixture immerse the cotton. Afterwards dry.

### SOLUTION BISULPHITE OF LIME.

THIS solution is extensively used for preserving meat and other food stuffs. It may be made as follows:—

				Parts
Sulphite of lime ..	..	..	..	250
Sulphuric acid ..	..	..	..	100
Water ..	..	..	..	1,000

Mix the acid and water, and when cold put it into a strong bottle and add the sulphite of lime. Now cork tightly and agitate well. Sometimes effervescence ensues from escape of carbonic acid derived from carbonate of lime present as an impurity. The liquid can now be strained with expression and filtered, or recovered by running through a funnel plugged with absorbent cotton and the original amount recovered by displacement with water.—*Druggists' Bulletin.*



## Medical Cleanings.

### TREATMENT OF GONORRHOEA.

CREOLIN, known in this country as Jeyes' Disinfectant, is spoken highly of by Dr. Margaretti as a remedy for gonorrhoea. Cases which resisted other treatment have frequently yielded in his practice to irrigations, twice daily, with a 5 to 8 per cent. solution administered through a hollow sound.

### PAPAIN IN INDIGESTION.

DR. GRINERITSHI speaks highly of the use of papain in dyspeptic conditions characterised by an habitual failure of digestion by acid eructations, and by the painful symptoms of gastric fermentation (*Bull. Gen. de Therap.*). He administers 1 to 2 grains of papain (Finkler) mixed with 4 to 6 grains of sugar of milk. This dose is taken an hour or two after food in a tablespoonful of an alkaline mixture containing bicarbonate of sodium, carbonate of ammonium, carbolic acid, and glycerine. Dr. Grineritshi states that the pain due to acid fermentation is by this treatment completely relieved, the excess of acid being neutralised as digestion proceeds. He considers that papain is without a rival as a digestive ferment, and reports the cure by its use of the most obstinate cases of chronic dyspepsia, even though associated with pain and with constipation.

### SWEATY FEET.

DR. LE ROY DIBBLE, of Kansas City, attributes (*Weekly Medical Review*) certain catarrhal affections of the head to insufficiently clad and sweaty feet, especially when cotton socks are worn. He treats his patients by directing them to wear woollen stockings changed twice a day, also to have two pair of shoes, so that they can be changed every night and thoroughly dried before being worn again. He also directs them to use one of the following prescriptions:—

Tr. ferri muriatis .. .. 3ij.

Apply to soles of feet and between toes on retiring.

Chloral hydrate .. .. 3ij.  
Water .. .. 3j.

Apply as above.

Potassium permanganate .. .. 3j.  
Water .. .. 3ij.

Apply as above.

### MUMPS

are, according to the *Weekly Medical Review*, greatly relieved by a free application every three hours of the following ointment:—

Iodoform .. .. 3j.  
Morph. sulph. .. .. gr. v.  
Unguent. belladonnæ .. .. 3j.  
Lanolin .. .. 3ij.

M.

After applying the ointment the parts should be encased in oil silk, then covered with absorbent cotton, and snugly bandaged with a flannel roller.

### TREATMENT OF SCABIES.

DR. WHITE, Professor of Dermatology at Harvard, says he generally employs in dispensary practice the following ointment or liniment, and it is applicable in every case, however extensive or severe may be the accompanying inflammatory symptoms:—

Flowers of sulphur .. .. 3ij.  
Beta-naphthol .. .. 3j.  
Balsam of Peru .. .. 3j.  
Vaseline .. .. 3j.

M.

This quantity is generally sufficient for the cure of a case. The patient is directed to rub a third of the mixture into the whole surface of the body, from the neck downward, at bedtime.

### INDIAN HEMP IN THE CHLORAL AND OPIUM HABITS.

DR. E. A. BIRCH, physician to the General Hospital, Calcutta, reports to the *Lancet* some interesting notes on the use of Indian hemp in curing those who are addicted to the excessive use of opium or chloral. He gives two cases as examples, but he has tried the treatment in many others with equally good results. One case was that of a gentleman whose depression of spirits was terrible; he had frequently contemplated suicide; insomnia was almost complete, no sleep whatever being obtained without the aid of chloral, and then but little. He could take scarcely any food. An attempt was made to treat him without restraint, but it was unsuccessful. Finally, he voluntarily agreed to place himself under circumstances which admitted of surveillance and restraint. His chloral was peremptorily stopped, and he was prescribed a pill containing half a grain of ext. cannabis ind. with a few grains of the compound colocynth pill, to be taken three times a day. The result was an immediate improvement. The craving for the chloral had almost vanished in twenty-four hours, natural sleep returned after a few days, and he began to enjoy his food. Eventually he returned to his home and work a happy man, but much disappointed because the name of the drug used was not communicated to him. In the next case, that of an opium-eater, a Eurasian gentleman of 24, the condition of the patient was so bad that Dr. Birch describes him as resembling an "exhumed corpse." In this case the extract of cannabis was also administered, beginning with doses of  $\frac{1}{4}$  grain and increasing to  $1\frac{1}{2}$  grain three times a day. Again the results were marvellous, and in six weeks the patient, previously prostrate, was able to go about, and spoke of returning to his work. Dr. Birch insists upon the necessity of concealing the name of the remedial drug from the patient, lest in his endeavour to escape from one form of vice he should fall into another. The prescription should be made as complex as possible, and at the earliest moment the dose of the extract should be diminished gradually till eventually it is withdrawn altogether from the prescription.

### HOW ANTIPYRIN ACTS.

MR. ERNEST HART, editor of the *British Medical Journal*, recently paid a visit to Paris, and a series of articles on "Medical Paris of To-day" is one of the results. In one of these (p. 732) he gives an interesting account of physiological experiments by M. Albert Robin on antipyrin. So far as the influence of this drug on nutrition is concerned, Robin finds that it diminishes disintegration, the destruction of albuminoid matters being especially retarded, so that the elimination of nitrogen and sulphur is decreased by  $17\frac{1}{2}$  and  $14\frac{1}{2}$  per cent. respectively. But the drug does not act equally upon all nitrogenous matters of the organism; its activity is, in fact, concentrated on the nervous system, which is richest in nitrogen and phosphorus. As most cases of nervous excitability have a direct relation to the oxidation of phosphorus (thus "lightning pains" of the daytime are assuaged at night, because during the latter period oxidation is at a minimum), it follows that antipyrin, which prevents this modification or oxidation, should be a moderator of nervous activity. It is, therefore, evident that in all conditions, on the one hand, in which one indication is to avoid producing nervous depression, this drug is contra-indicated; but in painful affections of the heart, as in certain cases of angina pectoris, and in the considerable group of neuroses, especially in chorea, antipyrin may be employed with advantage. M. Albert Robin has shown, moreover, that in diabetes and in polyuria antipyrin seems destined to a certain future, seeing that we have in antipyrin a sure means of diminishing the quantity of the sugar as well as of the urine. But these researches are still incomplete, and the data obtained, so far, are inadequate for the institution at present of the therapeutical treatment of diabetes. The use of antipyrin against hyperpyrexia, and, consequently, its employment in fevers, would appear from these chemical investigations to be of very doubtful advantage. Finally, the antiseptic action of antipyrin will certainly find sufficiently numerous applications because it is manifested with small doses. It is probable that the advantageous effects which have been obtained from it in the advanced or febrile period of pulmonary phthisis are due to the double action of the drug on the organic exchanges and fermentations.



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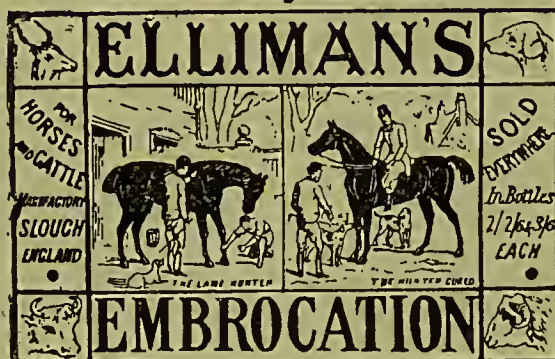
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See DIARY, 1889,  
Pages 17 and 18.

## EDITORIAL NOTES.

### THE ANTI-VIVISECTIONISTS AND THE PHARMACEUTICAL COUNCIL.

THE clever and influential ladies and gentlemen who are  
associated in the Society for the Protection of Animals from  
Vivisection, seeing in the recent development of the Research  
Laboratory of the Pharmaceutical Society a covert movement  
towards the practice which they expressly aim to suppress,  
have issued a circular to members of the Society asking for  
an expression of opinion adverse to any such movement, and  
urging the practical manifestation of their opposition at the  
approaching Council election. The suspicion awakened was  
certainly not entirely unjustified. Ambiguous expressions  
in relation to the work of the laboratory have been published,  
and eminent vivisectionists have favoured it with their osten-  
tationous patronage. Moreover, all medical research nowadays  
has acquired such an intimate connection with experiments  
on animals that the very word "research" has almost  
become a euphemism for the even yet unpopular term  
"vivisection." At the same time there is not, we should think,  
any real danger that Galen Place will ever become a physio-  
logical laboratory in any sense. Experiments on animals in  
a pharmaceutical research laboratory would be utterly out  
of place, and were certainly not contemplated by the  
members of the Society when they authorised the scheme  
for its establishment; and we believe we may assure the  
Victoria Street Society that any attempt to so use or abuse



the building would be met with all the condemnation they themselves could desire. But except on the theory that some conspiracy of the kind anticipated was hatching, we are at a loss to understand the uncalled-for incivility with which the action of the anti-vivisectionists has been officially met. The Pharmaceutical Society's organ finds it "difficult to decide whether the ignorance betrayed in this totally gratuitous assumption"—the assumption, that is, that the Research Laboratory has been established with the object of promoting experiments with drugs on animals—"is more amazing than the impudence of the attempt to interfere with the affairs of a society with which the persons issuing this circular have no kind of concern." The argument involved in this denunciation is as arrogant and puerile as it is ill-mannered. It claims that the Pharmaceutical Council is a body whose doings are to be beyond the range of outside criticism, beyond the control of law or social convenience. Seeing that the Pharmaceutical Council has placed such men as Michael Foster, F.R.S., professor of physiology at Cambridge, and T. Lauder Brunton, M.D., an eminent vivisector, on its Research Committee, the circular issued with the authority of such persons as Lord Coleridge, Cardinal Manning, Tennyson, Browning, and many other of the loftiest names in England, demanded and was worthy of, we should judge, at least a respectful reply.

But unfortunately there is no satisfactory reply to be given to the request contained in the circular. Members of the Pharmaceutical Society can only tell the Anti-Vivisection Society that they never let questions of policy govern their election of members of the Council. On what principle they do elect these gentlemen it would be puzzling to say. It can hardly be disputed that the policy of the majority of the Pharmaceutical Council has been out of harmony with the opinion of the trade for some years past. We should be surprised if, as a policy, it would command the support of a decent minority even of the members of the Society itself. And yet we go on year after year electing the same men, or men ready to support the old policy, without even putting a question to them. Mr. Carteighe and his followers have a perfect right to claim that their policy holds the field; that by all the rules of public life the members of the Society pine after the Curri-culum Bill, enjoy the wild expenditure of their funds on objects which interest scarcely a tithe of them, and desire nothing more than is being done for them.

It will be a fortunate day for pharmacy when candidates for the Council can be induced to have a policy and declare it, and when the voters allow themselves to be somewhat influenced in selecting their representatives by the views expressed. Under present circumstances there is no practical method of protesting against a policy except by not voting at all. This form of protest is widely enough adopted, but it has no material effect.

The forthcoming election is not likely to be different from its predecessors; none of the candidates, either among those now members of the Council or among the four untried candidates, has raised the flag of revolt against the present conduct of affairs, nor said or done anything which by the remotest stretch of poetic fancy could be brought within the range of that metaphor. We have, therefore, only the choice of persons, not of policies; and though there is abundant reason to believe that widespread and reasonable dissatisfaction exists with the Council's proceedings, especially in regard to legislation, there is, we fear, little opportunity of influencing these proceedings at the forthcoming election, or even of indicating the opinion prevailing in the country in reference to them.

## IODINE ABSORPTION OF ESSENTIAL OILS.

It sometimes happens that pharmaceutical investigators in different parts of the world unconsciously light on the same subject at the same time, but not always with the same results. While Mr. Davies was reading his paper on "The Iodine Absorption Equivalents of Essential Oils," the mail was bringing to us the March issue of *The New Idea*, in which we find a paper by Mr. H. W. Snow on "Iodine Absorption as a Test for the Purity of Essential Oils." Mr. Snow has travelled over much the same ground as Mr. Davies, apparently in ignorance of the work done by Barenthin on the subject; but he has given more attention than either of these chemists to the influence of time upon the absorption of the iodine. It will be remembered that in our report of Mr. Davies's papers we pointed out that the differences between his figures and Barenthin's might be due to difference in the time during which the iodine and essential oil stood together. Mr. Snow carefully went into this point—his comparative experiments running from three to forty-eight hours—and he found generally that with increase of time iodine absorption increased. Thus, oil of turpentine absorbed in three hours 291, in six hours 333, in fifteen hours 345, in twenty-four hours 353, and in forty-eight hours 397 per cent. Oil of bergamot absorbed 300 per cent. in fifteen hours and 345 per cent. in forty-eight hours; and so also in other cases there was an increase. We give some of the results by the three workers in the following table:—

Oils.	Percentage of Iodine absorbed.		
	Barenthin.	Davies.	Snow.
Anise .. .. .	164	189	121
Bergamot .. .. .	260	276	345
Calamus .. .. .	155	181	—
Caraway .. .. .	265	254	233
Cinnamon .. .. .	100	189	—
Cloves .. .. .	270	360	467
Fennel .. .. .	140	158	—
Juniper .. .. .	245	230	—
Lavender .. .. .	170	260	286
Lemon .. .. .	285	347	343
Pennyroyal .. .. .	—	189	152
Rosemary .. .. .	185	226	—
Turpentine .. .. .	303	307	397

Although not an absolute proof that time always increases absorption, these figures show that it is an element which cannot be disregarded, for Barenthin's figures are for "three or four hours," Mr. Davies's for "one night," and Mr. Snow's for forty hours. On the other hand, Mr. Snow's experiments with oil of thyme and thymol showed a decrease of over 20 per cent. between the fifteen- and forty-hour periods, and the absorption of two adulterated samples of oil of peppermint was greater at six hours than at fifteen hours. Mr. Snow concludes that his "experiments indicate that the iodine absorption of essential oils may yield figures having a considerable value in the determination of the purity of oils, but it is not likely that these figures are constants, except, perhaps, in a few instances, any more than the specific rotatory power, specific gravity, &c., are constants." This conclusion is, we think, somewhat premature. The subject is one of vast importance, and although the gentlemen who have taken it up have spent much time upon it, what they have principally shown is a want of agreement amongst themselves. Pharmacists are therefore left in doubt as to the value of the process, and before they can place any reliance on it they would require more precise information on certain points. First, the iodine is absorbed—that is, combines chemically with the oil, but with what portion



thercof? Second, when is the absorption or reaction complete? Third, are the same conditions of operation applicable to all oils? and lastly, is it applicable to mixtures of oils? It will be by no means an easy matter to answer these questions, for the labour and skill required to carry out the experiments are almost too great for one man; yet the subject is one of such great interest to chemists and pharmacists, and is so likely to yield new facts regarding the constitution of essential oils, that it would well repay continued investigation.

### THE TRADE OF BRITISH INDIA.

ACCORDING to the Blue-book on the Trade of British India, which has only just been published, though it covers the financial year ending March 31, 1888, the foreign trade of our greatest dependency continues to make satisfactory progress, imports having risen from 697,147,810 to 762,106,690 rupees, and exports from 901,131,710 to 919,854,160 rupees, exclusive of goods imported and shipped for Government account, which fluctuate considerably, as they are influenced by the greater or less extent of military operations during the year. The trans-frontier trade of India is almost exactly one-tenth of its sea-borne traffic, and the land exports principally find an outlet in Cashmere, Nepaul, and Southern Afghanistan, but in the North of Afghanistan and across the Chinese border the irritating interferences of the Ameer and the Chinese authorities still prevent a satisfactory expansion.

As regards the importation of the principal articles of commerce into India, cotton goods still head the list by a long way, metals, yarn, railway materials, and sugar being next in importance. The principal exports, in order of their importance, and in millions of rupees, are—Cotton 14½, opium 10, seeds 9½, husked rice 9¼, jute 6, wheat 5½, and tea 5. Respecting the imports of oils, the bulk of the quantity is represented by mineral oils, of which the use, although temporarily checked by an import duty imposed a short time ago, is steadily superseding that of the vegetable oils formerly exclusively used for illuminating purposes. Until recently the United States supplied practically all the petroleum used in India, but since 1886 Russian oil has made enormous headway, and its consumption last year almost equalled that of the American oil. The petroleum springs of Afghanistan, of which so much was talked a short time ago, yield an oil which is only fit for use as a fuel for locomotives, and that found in Upper Burmah is mostly employed for machinery purposes. It is also noteworthy that although there is in India an abundance of material and every facility for manufacturing ground-nut and linseed oils, yet considerable quantities of these oils are imported into the country from the Straits Settlements.

The development of the Indian wheat trade dates from 1873, when the export duty was abolished, and though, owing to a bad harvest, the shipments in 1887-8 have somewhat retrogressed, the fact that the total exports have grown from less than 20,000 tons in 1872-3 to 1,113,000 tons in 1886-7 sufficiently indicates the importance which this branch of traffic has attained. Until a few years ago Bengal supplied the bulk of the article, but lately Bombay has taken the lead, and Sind also is now shipping largely. We have frequently had occasion to point out the enormous growth of the consumption of Indian tea in this country to the detriment of the Chinese leaf, and it appears that a similar preference is being accorded to the teas of India in the United States, which consume about 70 millions, and in Australasia, which takes at least 20 millions of lbs. a year. The principal reason why Indian tea is gaining so much popularity appears to be found in the bad habits of the

Chinese themselves. They are, in fact, losing their tea trade for much the same reason that is said to cause our cotton exports to wane, viz. unreliability in manufacture.

Oil-seeds form a very large item in the Indian export trade, lin-, rape-, and gingelly-seeds being the three principal articles under this head, followed by earthnut, castor- and poppy-seed. During the year there was, it is stated, an exceptionally large shipment of fenugreek seed to Italy from Madras. As regards cinchona bark, notwithstanding the steady fall in prices there has been a further advance in the exports, the figures being: 1883-4, 306,419 lbs.; 1886-7, 1,286,900 lbs.; 1887-8, 1,449,313 lbs.; nearly all of which came from Madras. With the exception of 300 lbs. which went to France, and 1,186 lbs. which were sent to the States, the whole of this supply was shipped to England.

Roughly speaking, it may be said that the trade of the five largest Indian ports is divided in the following proportions, in millions of rupees:—Bombay 910, Calcutta 708, Rangoon 148, Madras 111, Kurrachee 89. Calcutta still has the largest export trade, but for import and coasting business she is nowhere compared with Bombay. The trade of Rangoon is increasing at much the quickest rate at present, owing to the development of Burmah, to which it is the principal entrance. The expansion of the Burmese railway system, and increased facilities for communicating with Southern China will certainly give a still greater stimulus to the trade of this port.

Of the various countries with which British India carries on her business the United Kingdom is first with three-fifths of the whole volume. At a long distance comes China, then France, the Straits Settlements, the United States, and Italy. The direct trade between Germany and India is very small at present, but within the next few years the returns will almost certainly show a great advance, owing to the increased direct steam communication between the two countries. India is the country to which the eyes of all the principal manufacturing nations are now directed, and Austria, like France, has quite recently established direct steamship communication, with the result that the imports of both countries have largely grown.

The imports of quinine into British India show an almost unbroken increase, the figures in lbs. being:—

1883-4	1884-5	1885-6	1886-7	1887-8
9,933	12,264	11,859	12,088	13,937

Of last year's imports nearly the whole came from the United Kingdom, the odd shipments having consisted of 321 lbs. from France, 152 lbs. from Belgium, 182 lbs. from Austria, and 23 lbs. from the Straits Settlements. Of aniline dyes the imports have grown from 8,094,006 oz. in 1883-4 to 13,976,914 oz. in 1887-8. The exports of gums and resins, which were 2,180 cwt. in 1883-4, had advanced to 37,132 cwt. last year.

### TO CORRESPONDENTS: A CHEMIST'S LIBRARY.

As the age of this journal as a weekly exponent of the art and commerce of pharmacy increases, the Editor's post-bag increases in bulk, and its contents are in some measure summarised in the correspondence columns. From the first we perceived that this was to be a department of our work which would take up both time and thought largely, and it was necessary to restrict, by harmless and inoffensive rules, the nature of queries submitted to us, and the manner of putting them. We print these rules weekly in the expectation that our correspondents will read them and follow the simple injunctions before they submit their effusions or



questions to the care of her Majesty's Post-office. Yet there are transgressors; our labour is unnecessarily increased, and such correspondents as are the sinners become impatient because their letters may not have the attention they expect. These and other circumstances convince us that a few thoughts on correspondence will not be out of place at present. It is not altogether a matter which interests a section of the trade, for letters come to us from all parts of the globe, and in several languages—proofs, therefore, that the department is one of common interest. Anonymity is not a virtue in the eyes of public men; yet the letters of Junius have come down to us with a halo of interest and value around them which proves that it is not altogether a fault. Modern journalism is anonymity materialised. The reputation and success of a journal give weight to the opinions expressed in the editorial columns, and no one dreams of suspending judgment upon these opinions until he finds out who the writer may be. This is as true of pharmacy as of everyday life, and we may fairly say that those who feel compelled, on rare occasions, to assert the contrary, play their last card in a weak game. What is true of the editorial columns extends, in a measure, to correspondence; a good argument is none the worse because "Anon." is at the bottom of it, but it is all the better when "John Smith" gives it his endorsement. But it is the universal custom to let some one into the secret, if secret there be, and that one must in all cases be the editor. Hence the importance of our first rule. It is doubly important, we may add, from another point of view—when the writer wishes some knotty point decided; for in this case we are justified in assuring ourselves that the writer is entitled, as a subscriber or employé of a subscriber, to the desired attention. Our next rule is a very simple one. We ask for communications to be written on one side of the paper if the writers wish them printed. This, we are glad to say, is very generally followed; but we may explain, without violating professional secrets, that it is to facilitate the distribution of the manuscript in the composing-room. It is obvious that a sheet written on both sides can only be used by one compositor, and he may take half a day to do what half-a-dozen men could do in half an hour. For a somewhat similar reason we insist upon each query having a piece of paper for itself. All well-conducted offices are carried on under the departmental principle, and in our office the principle has, for obvious reasons, reached a high stage of development. Hence the necessity for keeping matters of essentially different character by themselves, so that there may be no cause for delay. Of our other rules, perhaps the most important is that in which we advise correspondents to consult back volumes before they write to us for formulæ and practical information. The frequency with which this rule is violated has compelled us lately to adopt the plan of giving references to back numbers containing the information instead of reprinting it. We so save much space, which can be utilised for the benefit of more careful readers. But we are forced to the conclusion that some chemists are wanting in a proper respect for the value of books, that "the chemist's library" is with them a thing unknown. Were we to probe this matter to the bottom we should find that many of these are among the grumblers of the trade; success does not follow their efforts simply because they have not book information to supplement their deficiency in skill and knowledge. To such men Emerson's words are as grains of gold: "All books," said the American philosopher, "that get fairly into the vital air of the world were written by the successful class, by the affirming and advancing class, who utter what tens of thousands feel, though they cannot say." Surely the experience of the successful or book-making class of pharmacists ought to be a remunerative business acquisi-

tion to all chemists, and when it can be obtained so cheaply as in the covers of compact volumes there is little excuse for ignorance. We hear of guineas being paid for single formulæ of new preparations; how much better would it be for those who spend such sums to utilise it in buying books or binding the half-yearly volumes of *THE CHEMIST AND DRUGGIST*! The scribe who in a weak moment supposed that this journal is ephemeral literature must have been a man to whom the practical side of pharmaceutical life is a closed book; but we know that to many of our readers some of the articles and formulæ which we print may at present be of no use, still a time may come when their value may be incalculable, and it is then that the importance of a file is accentuated. We have recently had an exceedingly good proof of the influence of a book upon one section of our correspondence, viz. the Dispensing Notes. That section, it will have been noticed, has visibly shrunk, and is it not because 6,000 copies of "The Art of Dispensing" have been taken by our subscribers? This, at all events, is the only reason which suggests itself; and it is further noticeable that questions of a purely elementary character have almost ceased in this department. This proves our case—that for expediting, and in certain circumstances improving, business, a chemist's first requisite is a small and well-selected library. Let it simply be the British Pharmacopœia, the Extra Pharmacopœia, Cooley's "Cyclopædia," Remington's "Pharmacy," Beasley's "Receipt-Book," *THE CHEMIST AND DRUGGIST* and its publications, together with all the books which he used in preparing for his examinations—the chemist will find that reference to these as occasion may require is a material aid to him in his business. This is altogether apart from the question of reducing our correspondence. We have always exercised the right of settling what may and what may not be trivial, and we are not likely at this stage of our history to begin withholding help to chemists in their technical difficulties; what we urge is a greater respect for books, and more frequent reference to them.

**Oil of Peppermint.** In a recent discussion regarding American oil of peppermint the opinion was freely expressed that it is often very doubtful what that oil really is. This unfortunately is the case. Competition in price has created a demand for a cheap article, and there is perhaps no oil in the market which is so ingeniously falsified as American oil of peppermint. There are several genuine brands, we admit. Mr. H. W. Snow states that of all contaminations the most vicious, whether wilfully added or the result of careless growing, is that of the so-called ragweed oil and other "weed" oils, many of which materially lower the quality of the oil even when present in very small quantities. In regard to the latest test for this oil, viz. the iodine absorption equivalent, Mr. Snow states that for eighteen commercial oils he obtained a very considerable range, running between 24 and 179 per cent. of iodine. Ordinarily the percentage was found to be between 70 and 110. In one case a very satisfactory and high-priced oil, purchased some years ago, and before sharp and unscrupulous competition had injured the quality of oil of peppermint, showed an absorption of only 24. In another case an equivalent of 179 was found; but this oil may not have been pure. [Mr. Davies examined four samples, and obtained 132, 143, 121, and 81 per cent.] Where considerable amounts of turpentine have been added iodine absorption will indicate it when determined direct for the oil; but it is always safer to resort to fractional distillation, and compare the iodine absorption of the fractions with that of the oil undisturbed by distillation. This is also necessary when the presence of oil of copaiba is suspected. The iodine absorption of this oil is 250, and as its boiling-point is high (245° C.) it follows that if carefully fractionated a sample of oil of peppermint containing oil of copaiba will give a residue, the iodine absorption of which will be higher than the residue of a pure peppermint oil. It is noteworthy in regard to adulteration with turpen-



tine that an oil giving, with the first fraction of 1 drachm from 1 oz., less than 125 for its iodine absorption is not very likely to be adulterated with turpentine.

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**Warner's Safe Cure in Vienna.** On Monday, April 15, a police raid was made upon all pharmacies in Vienna and their entire stock of Warner's Safe Cure was seized and placed under seal by order of the authorities.

The latter have not deigned to explain the reason of their step, and the happy Vienna apothekers, who are too well drilled to protest, are racking their brains to find out why they should thus suddenly be robbed of part of their stock in trade. The "formula" of the "Safe Cure" was exhibited in every pharmacy, and the sale of the speciality by apothekers had never been prohibited. It is thought that the authorities were prompted in their action by the manner in which the "Cure" has been advertised in the Vienna journals, which is defied as "marktschreierisch," or charlatanical. The same fate which befell the "Safe Cure" was meted out to another speciality manufactured in Cologne.

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**The Imperial Federation League.** The journal of the Imperial Federation League for April contains an elaborate table of the British Empire and its dependencies, giving particulars as to the various members forming the empire, their capitals, areas, populations, public revenue, trade, debt, and government. The table is supplemented by a coloured map of the world on Mercator's projection, executed by Messrs. John Bartholomew & Co., the Edinburgh cartographers, and showing by colours the various forms of government obtaining in all parts of the empire. It appears that nine parts of the empire possess a full constitution with a responsible government each, in nine others the Legislature is partly elective and partly controlled by the governors. No fewer than twenty-two, mostly among the smaller islands, are Crown colonies, directly controlled by the Imperial Government; twenty-one are dependencies of dependencies, fifteen are internally independent protectorates, and four parts are nominally British, but not under authority; two of the latter, the icefields along Baffin's Bay and Graham Land, beyond the Antarctic circle, being, in fact, incapable of occupation, though they greatly enhance the glory of the empire as seen on coloured maps. Our oldest dependency is the Channel Islands, which came to us in 1066 as an appanage of the Norman Conqueror, and from that time right up to date we have gone on earth hungering, thankful but yet not satisfied. In 1885 we absorbed the Somali coast in East Africa, a territory of unknown area, undefined trade, and with neither public revenue nor public debt. We also added the Transkei, Pondoland, and Zululand in South Africa, and part of New Guinea in Australasia. In 1886 we took Upper Burmah and Soetra Island, 1887 was spent in digesting these acquisitions, and in 1888 we absorbed Brunei and Sarawak in Borneo, Matabeleland as far as the Zambesi, the territories of the British East African Company, and the Hervey or Cook Islands—a total in that one year of over 353,000 square miles, or three times the size of the United Kingdom, and very many times larger than the presently famous Oklahoma. In calling silent attention to these expansions the Imperial Federation League is doing a useful work.

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**The Public and the Curriculum.** The *Star* is the first paper to see that the proposed pharmaceutical curriculum has a direct interest for the public as well as for chemists and druggists. Under the title of "More Protection," the *Star* says:—"The protectionist is always on the look out for a chance of working some mischief. Just as the Sugar Convention has raised the price of sugar, the Pharmaceutical Society, a body of chemists and druggists engaged in business, are attempting to limit the selling of drugs to a small and very select class, and make a close monopoly of their trade. The general public have no idea how this assault on their interests and the principles of free trade is carried on. It is this. A Pharmacy Act Amendment Bill is being promoted by the Council of the Society, and under the apparently harmless provisions of the second clause they seek to compel all intending chemists to attend such a course

of instruction as they may prescribe, before even allowing candidates to be examined. At present anyone who can pass a severe examination before six separate examiners is allowed to open shop for the sale of drugs. And why not? So long as the man is competent, what consequence is it where he was educated? Does the London University compel candidates for B.A. or M.A. degrees to attend certain lectures? No: all it says is—"Pass the examination"; and why should the Pharmaceutical Council want more? The additional expense this would cause candidates would be a serious burden on many who, from want of means, could not afford to lose so much time in attending lectures, but who now study hard privately, and make good chemists. But the organ of the Society, the *Pharmaceutical Journal*, lets the secret out when it speaks of the proposed 'requirements having the effect of reducing the number of persons who adopt pharmacy as a calling.' Just so. Protect our own interests, reduce the numbers in the trade, and keep out all but the wealthy and well-to-do. Surely the public only need to know the way in which their interests and the principles of open competition, free trade, and political economy are being attacked for Parliament to reject so retrograde a measure."

#### AN AUSTRALIAN TRIP.

**MR. H. E. STEVENSON**, of the firm of Fletcher, Fletcher & Stevenson, manufacturing chemists, Holloway, called in this office a few days after returning from his Australasian tour. He had obviously brought back a fresh store of health and vigour, and though somewhat reticent (as all chemists are) as to the commercial results of his enterprise, his reticence seemed to partake of a satisfactory character.

We told him it might be useful for his competitors and others to have some particulars of his journey, and this is something like the story that Mr. Stevenson narrated:—

"I was away from England six months almost to a day, and just about half that time was occupied in travelling, either on the voyage out and home or from colony to colony. I visited all the seven Australasian Colonies in that time, and did business in all. Of course Victoria and New South Wales occupied the greater part of my time, but I had a day at King George's Sound in West Australia on my way out and another day coming back. I spent eight days in Adelaide, from Melbourne I made a trip to Hobart in Tasmania, and from Sydney I visited Queensland and New Zealand. I found it impossible, however, to cover New Zealand in the time at my disposal. I only visited the northern island. New South Wales was in the throes of a general election while I was there, the free-trade question being the prominent topic. The protectionist party, as you know, gained a considerable advantage at that election, and among the merchants and others with whom I conversed I found there was an almost universal belief that a protectionist policy would soon be adopted in New South Wales, as in the other colonies."

The interviewer having at this point interjected a free-trade platitude, Mr. Stevenson continued:—

"No, I don't think protection would make any difference to us. We find it just as easy to do business in Victoria as in New South Wales, in spite of the protectionist tariff in the former."

"Did you have a good time socially?"

"Very; and as your paper is very widely read in Australia I should like to say how gratified I was with the very kind reception I met with wherever I went. Generally, if I stayed long enough in a place, I was put up at the club, and was often invited to the country houses of the leading druggists. The colonists generally have the virtue of hospitality in a marked degree, and they know thoroughly well how to enjoy themselves. They go in heartily for all forms of sport—racing, cricket, football, and the rest."

"Do they work as hard as they play?"

"Yes, their hours are much the same as here. There are at least two wholesale drug warehouses in Australia which it would be difficult to match anywhere in this country. These are Felton, Grimwade & Co.'s in Melbourne, and Elliott's in Sydney. The latter is the newer, and money has been freely spent on it. It is a very fine place indeed."

"Were the wholesale people there glad to see you?"



"Well, perhaps they would rather British and American firms were not represented there; but I found them all very kind, and I think there is a growing tendency among the retailers to buy from the colonial firms, and to import less. The merchants there seem to make money easily, and to spend it as freely. Their homes are often beautiful places, as luxuriously furnished as the first-class country houses of this country. I should think there is a higher average of prosperity in Australia than here. There may not be so many large fortunes, but there are certainly fewer poor. I rarely saw a beggar. The working-man is a great power in the colonies. If he is a competent artisan he can earn handsome wages, and he is correspondingly independent. If he works over eight hours a day he gets high pay for the overtime. This applies, I was told, even to the sailors on the inter-colonial services, many of whom are said to make a better income than the second or third officers on our passenger lines. Food is not dear, but for most things, imported goods especially, prices struck me as very high. Chemists seem to get good prices almost everywhere. The usual price for a 1s. 1½d. patent is 1s. 6d., and 3s. 6d. will be charged in a good shop for an 8-oz. mixture in all the colonies. The hotels are not very comfortable; you have to pay 5s. to 10s. for a cab-ride for which in London you would only pay 2s. or 3s., though for railway travelling the rates did not seem exorbitant, but, of course, long distances have to be covered."

Mr. Stevenson further said that in Victoria, Queensland, and Tasmania he heard of a want of competent British assistants; he did not recollect hearing of any such demand in the other colonies. He thinks we hardly realise on this side what wonderful progress has been made in Australia, what splendid cities have grown up there, and how modern improvements and conveniences have been adopted. Adelaide, if not so go-a-head as Melbourne and Sydney, is a very pleasing city. It is built almost entirely of brown stone, and has an air of comfort. Melbourne is built more on the American plan of blocks of buildings with rectangular streets. Collins Street is a noble thoroughfare, and Mr. Stevenson compared it, as he spoke, to Cannon Street, which lay below him, not to the advantage of the latter. Then Mr. Stevenson remarked on the beauties of Sydney Harbour, the scenery round Hobart and New Zealand, which he had never seen surpassed, and the gorgeous semi-tropical vegetation of Queensland, where he saw sensitive plants growing wild, the agave, the aloe, the sugar cane, and all palms in full luxuriance, coca, tea, coffee, nux vomica, and other medicinal and economic plants in cultivation. The journey, he said, left many sunny memories in the mind, and this expression might be used in more senses than one, for, he added, he started business at Adelaide with a temperature of 107° in the shade, which went up to 112° or more while he was in Queensland.

'Change time had come, but Mr. Stevenson did not leave without adding the satisfactory remark that wherever he went he found the name of his firm familiar, thanks to their advertisements in *THE CHEMIST AND DRUGGIST*. He saw or heard of this journal at the wholesale and retail druggists' stores in all the seven colonies, and discovered that it was read and appreciated fully as much in Australasia as in the United Kingdom.

THE London correspondent of the *Pharmaceutical Era* informs his American friends that American pharmacy is in the van in England. Amongst other things he says: "Nearly all the new preparations or compounds which have lately taken places in our *armamentarium medicamentorum* have been introduced to the notice of the medical profession and of pharmacists by American firms, to which we are indebted for our supply of such now indispensable articles as antipyrin, salol, sulphonal, saccharin, lanolin, &c."

TALLEYRAND'S PECULIARITIES.—In the course of a discussion at a meeting of the British Homœopathic Society in reference to constipation, Dr. Dudgeon referred to Prince Talleyrand, whose bowels were only relieved by enema once a fortnight. His valet used to come to him and say, "Monsieur, c'est, aujourd'hui le jour," to which Talleyrand replied, "Déjà?"—he felt no discomfort. He had another peculiarity: his heart intermitted every fourth beat, which he said accounted for his long life—his heart took rests and didn't wear itself out.

## DAY AND NIGHT PHARMACY.

NEW YORK conceived the idea some time ago of keeping a section of its drug stores open day and night. The venture has been a success, we understand, and although in at least one Western city of the States it has not been so successful, that is no reason why it should not be tried in the West of London—the city of the world. If the night business is to succeed anywhere it ought to be here, where there is always some one about and never-ceasing sickness. Such, at least, is Mr. J. Kitching Matterson's idea, and he has lately determined to give the plan a fair trial. Since Mr. Matterson gave up, five years ago, the management of the drug department of the now defunct Civil Service and General Store (Limited), which had premises where the House of Pears now stands, he has successfully conducted a "cutting" business at 94 New Oxford Street, W.C., opposite the old store. The business has outgrown the premises, and lately Mr. Matterson acquired the lease of 108 New Oxford Street, which a few months ago was a dingy and uninviting auction hall; but now, mainly through the skill of Messrs. S. Maw, Son & Thompson as shopfitters, it is a bright and artistic pharmacy. One of our representatives, who called

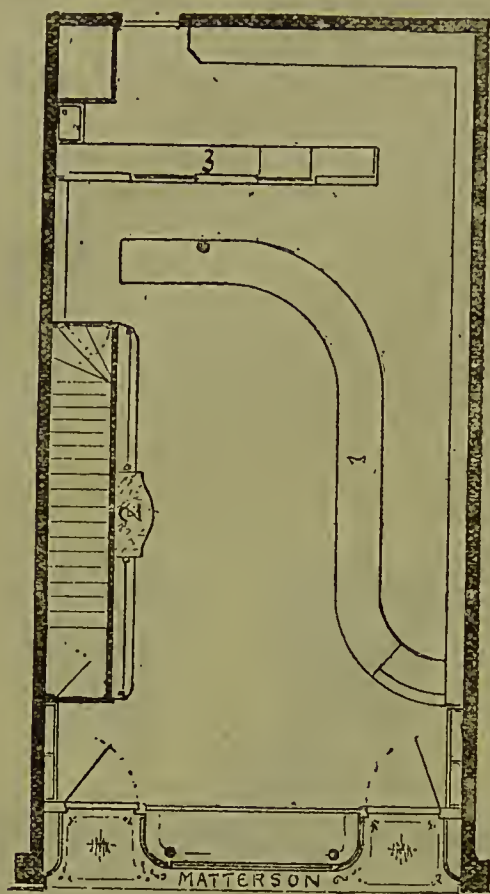


the other day to see how the day and night business was progressing, was struck with the originality and finish of the cabinet work, as well as the convenience of the arrangements. The front, it will be noticed, consists simply of a window enclosure, or glass case placed in the centre (thus providing two doorways), and about a foot back from the house front. This is an excellent arrangement, not only novel, but in many respects useful, and it has allowed the designers to continue the mosaic pavement of the doorways in front of the window, where the name of the proprietor is displayed. The window-case is fitted to the ceiling with glass shelving, relieved by olive-coloured plush, which covers the base and pillars, and is used for curtains at the back. The side walls of the doorways are also utilised for display, and we may fairly put it that the whole effect of this portion of the pharmacy is a perfect crystallisation of the ideas which we have recently published regarding window display. We must allow the ground-plan to show how the floor-space of the shop is utilised.

For this plan we are indebted to Mr. Whiteman, manager of Messrs. S. Maw, Son & Thompson's shop-fitting department. The scale is 1 inch to 12 feet. The design of the fittings is after the French Renaissance style, and is consistently



uniform in all particulars. We have only numbered the principal parts: No. 1 is the counter, No. 2 the wall show-cases, and No. 3 the dispensing department. The quaint form of the counter is effective, and allows good working space and standing-room for customers.



The fittings throughout are of American walnut, dull polished. The bottles are recess-labelled and have globe-shaped cut stoppers. The drawers have labels to correspond and handsome nickel handles. The shelf generally appropriated for ointment jars is divided into lockers for "patents," the fronts being mirrored. The top shelving on the three sides of the shop is to be filled with small specie jars with gilt covers and enamelled glass labels—a rather effective relief from the conventional black carboys. We need not enter into details regarding the fittings; the makers' names are proof of the finish; and doubtless many pharmacists from all parts of the country who contemplate refitting will pay this shop a visit if they can.

"It must have cost you a bit of money to get the place so nice, Mr. Matterson," said our representative, opening up a half-hour's conversation.

"Yes; I have not all the bills yet, but about 1,500*l.* will do it, and this will include the reversion of the lease and some builder's expenses. You see, I have everything as far as possible in harmony. These wrought-iron gas-standards, for instance, were made to suit the style of the cabinet work; and one of these days I will have a weighing-machine made of walnut and dark metal, which will be a good ornament and useful for my customers."

"Cutting seems to pay you, then. How do you like that style of doing business?"

"Very well; it is hard work, and there's plenty to do for the money, but that's better than standing idle." Then Mr. Matterson proceeded to tell our representative how he had built up his business. Being an old Store man he wanted to catch the Store customers by Store prices and methods—in short, he opposed his old establishment. Store prices, so far as drugs are concerned, yield roughly a gross profit of 20 per cent., but Mr. Matterson, by judicious pushing of his own proprietaries, has succeeded in gradually increasing the percentage to about 25 per cent. Working expenses reduce this to about 10 per cent. We do not feel justified in giving the "takings" of the "Day and Night Pharmacy," as Mr. Matterson has called his new store, but we may say that in the five years they have increased sixfold, and he intends to make them tenfold before he is much older. The growth of

the business he attributes to annual local distribution of "Price-List and Guide to Medical Economy," which has now reached its fiftieth thousand; of other advertising very little has been done, but the usual sound methods of increasing business, such as counter display, politeness, and attention, are not neglected, and drawing supplies from historic city houses is, said Mr. Matterson, "not the least important means of securing our customers." Then the "proprietaries" are well looked after. Every bottle of physic is sent out in a stout cardboard case, which has advertisements of four leading lines printed on it; and every parcel sent out just now has a free sample of liver and dyspeptic granules enclosed in it. This sample, we may add, consists of four of the granules in a neat oblong box, enclosed in an envelope which sets forth their virtues. "Then you don't push ordinary patents," said our representative. "No," was the reply, "but we give people what they ask for, and put in a word for our own when we can." "How often may that be?" "Pretty frequently. Of course not when we are busy."

"Now tell me what you intend to do regarding the night business. Do the assistants take it by turns?"

"No, they live out-doors. I have seven who come in at half-past eight in the morning, and leave at 10 in the evening, two going off at 6 o'clock two nights a week by turns. Another assistant comes on at 10 P.M., and stays throughout the night along with a night porter. During the night the porter occupies himself in cleaning, and giving any other necessary assistance. There is little retail business during the night; it is principally dispensing, and so far I am satisfied with it, considering that I have made no special announcement. I expect it to increase largely when I have called the doctors' attention to the matter. The shop is kept open, with a lighted lamp outside, and several of the gases burning inside, but I don't keep the window lighted."

"Do the 'cutting' prices hold good for night service?"

"No; I take full prices on Sundays, bank holidays, and after 10 P.M."

"What do you consider full prices?"

"Well, my ordinary dispensing prices are:—4-oz. bottles 8*d.*, 6-oz. 9*d.*, 8-oz. 10*d.*, 10-oz. 1*s.*, 12-oz. 1*s.* 4*d.*; and I say in my list that 'Other chemists usually charge:—4-oz. bottle 1*s.* 4*d.*, 6-oz. 1*s.* 8*d.*, 8-oz. 2*s.*, 10-oz. 2*s.* to 2*s.* 4*d.*, 12-oz. 2*s.* 6*d.* to 3*s.*' But I take a little less than that after 10 o'clock, full prices for 'patents,' and so on. In fact, I only do the 'cutting' business during the day."

Mr. Matterson then gave our representative further particulars regarding his trade. He delivers all parcels by tricycle messengers, of whom he has two constantly on the road. Ointments, castor oil, and all other "messy" things are not sold in small quantities but in put-up pots and bottles. Zinc and other ointments, and confection of senna, for instance, in 2-oz. pots for 6*d.*, 4-oz. bottles of castor oil for 4*d.*, and other similar articles in like manner; a separate staff being kept in the commodious cellars for doing this part of the business. No credit is given, and all parcels are paid for on delivery. A check-till registers all drawings. Assistants are paid weekly, and a week's notice, or the equivalent in wages, gets rid of any objectionable one. And we may add regarding Mr. Matterson himself, that he is a sharp young man, who will see several years yet before he is forty; he is continually behind the counter taking his full share of the work, and seems to make a feature of rendering little obligations to his customers. The motto which he has adopted is that celebrated line from Macbeth, "The labour we delight in physics pain," and the sun and the moon, with "Dies et nox," have, as a trade-mark, lately been called in to give effect to the new venture.

A GENERAL convention of medical and pharmaceutical associations and colleges for the revision and publication of the United States Pharmacopœia will be held in Washington, D.C., on May 7, 1890.

PURIFYING SHELLAC.—For the preparation of clear, pure, and concentrated solutions of shellac, Mr. F. Crane (Eng. Pat. 1887, No. 15,772) makes an alcoholic solution of shellac, and then agitates the solution with benzine or other substance, which dissolves the wax or other impurities of shellac, but does not mix with the alcoholic solvent. After standing at 30°–35° C. the alcoholic solution is drawn off, leaving behind the solution of impurities.



# A NEW CUTTING STORE.

SOME months ago Taylor's Drug Company, well known in the Leeds district as the pioneers of cutting in that quarter, and the owners of over a dozen drug stores, secured a building in High Holborn for the purpose of developing the same kind of business here. The invasion of London by the company has created a little excitement amongst West-end pharmacists, who would like to know the probable influence of the new venture upon such ruins of the metropolitan drug trade as "the stores" have left. Hitherto cutting in London has mainly been effected by co-operative concerns and a few individual chemists, but now we are having a taste of the "limited" pharmacy which the Pharmaceutical Council do not appear to think it their business to check. This company comes with a startling record of what it is possible to do in defiance of the present Pharmacy Act. They are reputed to have ruined the drug trade of Leeds, and although the London establishment is at present harmless looking, one naturally wonders when the company will extend its operations to other districts in the metropolis. The first establishment is situated on the north side of High Holborn, midway between Fifth Avenue Hotel and Gray's Inn Road. It is a building of five floors with a basement, and sign-boards on the front announce that it is occupied by "Taylor's Drug Company (Limited), high-class dispensing chemists and general drug stores; known everywhere." Our representative thought it worth while to look in one day in passing. He found an elegantly fitted-up shop, with single counter, in front of which glass cases are liberally used for the display of put-up goods. Ebony and gold are the predominating tones, but there is no lack of brighter colours from the numerous specialities which are scattered about. "We are satisfied so far," said an assistant, "with what we have done, and there is no question that the store will be a success. We intend to do the wholesale also, and have accommodation for it at the back. This street floor and the one above are arranged for the retail business, and we—there are six of us at present—reside in the three upper floors." "Do you mean to do in London what you have done in the North?" "Well, we are just beginning, you know." "I mean, are you likely to attack other districts of London?" "That we can't tell just at present. We shall establish ourselves in Holborn first. In the North we combine Italian warehouse goods with drugs, but are gradually letting the groceries go. Here we only do the drug part of the business. Dispensing is, of course, a feature, as you will see from our list." This our representative got a copy of, the assistant remarking that it was the Leeds list, and a special one would appear for London. To this was attached a card bearing an illustration of the Holborn branch, and an announcement that "Prescriptions and family recipes are dispensed by qualified pharmaceutical chemists, at one-half the prices usually charged." Drugs and other articles are offered at reduced prices, but not, as far as we can judge, below those which have been common in London for some years past. The following examples will suffice:—

Borax .. ..	1d. per oz.,	6½d. per lb.
Refined camphor ..	2d. „	1s. 6d. „
Camphorated chalk ..	1½d. „	1s. 4d. „
Epsom salts .. ..	1d. 4 oz.,	2d. „
Glycerine, s.g. 1.250 ..	1½d. per oz.,	1s. 0d. „
Gregory's powder ..	5d. „	5s. 0d. „
Compound licorice powder ..	2d. „	1s. 9d. „
Potassium bromide ..	2d. „	2s. 0d. „
Quinine sulphate .. ..	1s. per drm.,	3s. per oz.

The company make the most of the two windows which they have, and it is not an uncommon thing to see dozens of people standing at them admiring the contents. A porte is generally posted at the door distributing circulars, almanacs, &c. The company also advertise liberally in the daily papers.

**SHELLAC VARNISH.**—A nice thin varnish is made from shellac by first removing the fat from it. This is done by macerating small pieces in ether. After swelling sufficiently, excess of ether is poured off, when the shellac dissolves quite readily in spirit..

# WILLS OF DECEASED CHEMISTS.

The will (dated December 13, 1888) of the late Mr. Arthur Bolas, of Birmingham, chemist, who died on December 31, 1888, was proved on January 24, 1889, at Birmingham District Probate Registry, by Miss Amelia Bolas, the sister and sole executrix, to whom the testator gives, devises, and bequeaths the whole of his freehold or real and personal estate. The gross value of the personalty amounted to 550*l.* 7*s.* 11*d.*

The will (dated September 18, 1883), with a codicil, of the late Mr. Joseph Gillott, of Southport, homœopathic chemist, who died on December 2, 1888, at Leyland Road, Southport, was proved at Liverpool on February 14, 1889, by Mrs. Gillott, the widow, and Messrs. J. Humphreys, of Hazle Grove, and Alfred Palmer, of Reading, biscuit manufacturer, the executors. The gross personal estate amounted to 5,105*l.* 8*s.* 2*d.*, and the net to 4,897*l.* 5*s.* 5*d.* The testator, after leaving his household furniture and effects, &c., to his wife, constitutes her residuary legatee for life, and appoints his executors trustees to carry on his business so long as they deem fit, with power to employ as much capital out of his estate as they require, and with or without partners, and without their own personal supervision or responsibility. Upon his widow's death the estate is left equally between the testator's children.

The will (dated May 27, 1881) of the late Mr. C. T. Hammond, of Scarborough, who died on December 9, 1888, was proved at York on February 2 last by Mrs. Hammond, the widow, and Messrs. W. J. Wharam and R. Fussey, the executors. The gross personalty amounted to 3,094*l.* 14*s.* 5*d.* The testator leaves his widow an immediate legacy of 100*l.*, and appoints her a co-trustee with the two other executors, to whom he leaves 19*l.* 19*s.* each. He vests his estate in his trustees for the benefit of his widow and children.

The will (dated March 12, 1883) of the late Mr. D. R. Harris, of St. James' Street, Pall Mall, and Sydenham, Kent, pharmaceutical chemist, who died on November 30 last, was proved on February 2 at the Principal Registry of the Probate Division of the High Court of Justice by Mr. J. R. Scott, of Sydenham, and Mr. T. Hawkins, of Ludgate Hill, medical transfer agent, the executors, whom the testator also constitutes trustees, and to each of whom he bequeaths 25*l.* He directs them to carry on his pharmacies so long as they think desirable, and then to sell them and to divide the proceeds, together with the residue of his personal estate, between his three daughters. The gross personalty amounted to 3,652*l.* 15*s.* 6*d.*, and the net to 2,429*l.* 0*s.* 9*d.*

The will (dated September 30, 1875) of the late Mr. Edward Holmes, of Bentham, Yorkshire, who died on December 1, 1888, was proved at Wakefield District Probate Registry on January 2, 1889, by Mrs. A. Holmes, the widow, and Mr. Bryan Holmes, the son, the executors. The gross value of the personal estate amounted to 3,591*l.* 2*s.* 6*d.*, and the net to 3,373*l.* 8*s.* 6*d.* The testator devises all his real estate and bequeaths all his personalty to his widow for her separate and absolute use.

The will (dated April 9, 1888) of the late Mr. W. Pattinson, formerly of Patrington, Yorkshire, chemist and druggist, who died on April 11, 1888, has been proved at the York District Probate Registry. Administration was granted to Mr. W. Foster, the testator's nephew and executor. The gross value of the personal estate amounted to 538*l.* 13*s.* 1*d.*, and there are no leaseholds. After bequeathing legacies of 20*l.* and 25*l.* each to several nieces and nephews, the testator leaves the residue of his property, real and personal, to his said nephew, Mr. W. Foster.

Letters of administration of the personal estate of the late Mr. Joseph Wilson, of Penrith, chemist, who died on December 14, 1888, a bachelor and intestate, were granted on January 4, 1889, at the District Probate Registry at Carlisle to Mrs. Mary Sewell, of Ratlingate, and to Mr. William Wilson, of Little Salkeld, the sister and brother of the deceased. The surtices are Messrs. C. N. Arnison and Tom Lamonley, both of Penrith. The gross value of the personal estate amounted to 3,672*l.* 7*s.* 6*d.*, and the net to 3,427*l.* 11*s.* 4*d.*







in a temperature rather too low to be suitable for coffee-growing, the plantations are situated, many of them on the clearings of old mountain forests, which have been freed of the high a'ang-alang grass overgrowing them. The large Government plantations, containing over 1,500,000 trees in the open ground are also found in this province at Tirtasari, Tjinieroean, and Nagrak, near Bandung. They produced in 1887 nearly 800,000 lbs. of bark; their area is being constantly extended, and the old trees replaced by young ones of richer variety. It is now nearly thirty-five years ago since the first successful attempt at propagating cinchona was made in Java by Dr. J. K. Hasskarl, a German savant who had held the position of Government botanist in the Buitenzorg Garden, and Mr. F. Junghuhn, who had already made a great reputation in Holland and its colonies as a naturalist and scientific investigator. Although the former was the man who actually brought from South America, after a long and perilous journey, the plants from which the present cinchona trees in Java have originated, to Junghuhn belongs the credit of having carried the venture to a successful issue, and of having so carefully managed the plantations that when he relinquished their direction there were no less than 540,000 plants growing in the open, and some 620,000 in hothouses. Exactly twenty-five years ago, on April 24, 1864, this famous naturalist died at Lembang in Java, in the centre of the plantations which he contributed to create. Mr. K. W. van Gorkom, one of the subsequent directors of cultures in the Dutch East Indies, in his valuable book on the cultivation of staple products in Java, relates how Junghuhn's grave is placed at the crossing of the two principal avenues of succirubra trees in the Lembang plantation, a white needle which has been erected over the burial place being visible at a great distance. In Junghuhn's time two cinchona plantations were also commenced in other parts of Java, viz. Bezoeki in the extreme east, and on the high mountain-plateau of Dieng, in Malang, one of the loveliest districts of the island, but neither appears to have been successful.

#### PRIVATE PLANTATIONS.

As regards the cinchona estates belonging to private owners, the report which we have quoted makes mention of two cinchona plantations at Lebak, in the residency of Bantam, but only one of these has sent in a return, and this shows the undertaking not to be of any special importance, the 1888 crop having been only 38,000 lbs. Lebak may be mentioned, in passing, as being famous by reason of its connection with one of the most powerful modern Dutch authors, who by his writings, under the pseudonym of Multatuli, did much to improve the lot of the Javanese, among whom he had lived for many years as an official. The first attempt at planting cinchona by a private individual was made in Java in 1866 at Garoet, in the Preanger, a district in which, according to the returns, there are now no less than eleven plantations. This experiment was followed in the same year by the proprietor of Tjiomas, one of the best-known estates in Java, and where the cultivation of new articles appears to be always taken up with considerable energy, if we may judge by the fact that one of the consignments of coca-leaves which was recently offered for sale in London was grown on the same estate. Tjiomas is in the residency of Buitenzorg, so-called after its capital, which is the residence of the Governor-General of the Dutch East Indies, and of a large number of the well-to-do Batavia traders, who find among its splendid scenery and salubrious climate a pleasanter abode (Buitenzorg signifies "free from care") than the comparatively low-lying and swampy soil of Batavia can offer. At Buitenzorg is also found the magnificent botanic garden, now under the direction of Dr. Treub, which has contributed so much to secure the successful propagation of many exotic economic plants in the Dutch Indies. It was in these gardens that tea was first cultivated from plants sent from the Japanese island of Decima in 1826 by Dr. Siebold. Vanilla, cinnamon, and many other products were also propagated from here. At present there are in Buitenzorg seven cinchona plantations, but their output is but small. They are all situated in the southern part of the residency, the northern part—and indeed, most of the north coast of the island—being unfit for cinchona cultivation by reason of the alluvial character of the soil. The higher mountain ridges are the proper localities

for cinchona, coffee, and other produce, and they, as a rule, are nearer to the Indian Ocean, where the coast of the island rises steep and high above the almost unfathomable depth of the sea, than to the shallow Java sea in the north, where the soil is better fitted for growing rice, sugar, tobacco, indigo, and the like. The largest and richest plantations are found in Bandung and Tjiandjoer, the former district containing no less than seventeen and the latter fourteen plantations. The remaining Preanger plantations are found at Soemedang (one), Tasikmela (three), and Sockaboemi (five), the latter place being the seat of the Agricultural Society, which was founded, we believe, a few years ago for the purpose of promoting the interests of the Java planters, and enabling them to better combat the competition which they had to meet from other tropical countries. In the adjoining residency of Cheribon two plantations have been commenced, but neither of them has yielded any crop as yet, though it is expected that they will produce an aggregate of about 17,500 lbs. of 3 to 4½-per-cent. bark this season.

#### PLANTATIONS IN CENTRAL JAVA.

The plantations in Central Java are nineteen in number, but only three or four are of any great importance, the foremost among these being the Pagilaran estate, which in 1888 yielded nearly 200,000 lbs. of 6-per-cent. bark. This estate, with four others, is situated in the residency of Pekalongan, where is found the famous "valley of death," filled with nitrogenous exhalations for some feet above the surface of the ground, and fatal to animal life. Pekalongan is also known as a sugar-producing district. It has been frequently pointed out in this journal that in the present state of the cinchona market the only salvation for the planter lies in the production of a bark of very high quinine standard, and this is now generally recognised by the Java planters. The two richest plantations in the whole island are found in the Pekalongan residency—one of them, the Karang Mego estate, having in 1888 yielded a bark averaging 9.42 per cent. of quinine sulphate, while another produced 200,000 lbs. of 6-per-cent. bark. In the residency adjoining Pekalongan—that of Samarang, the capital of which, of the same name, is the third most important trading-port of the island—there are four plantations, one of which (Langenardjo) produces a very rich bark. The cinchona plantations here, however, are not of much extent, except one at a place called Ambarawa, where the 1888 crop was about 26,500 lbs. of 5½-per-cent. bark. With one more exception—that of the "My Bagelen" estate at Ledok—all the remaining plantations in Central Java are not as yet of much account. Several of them have sent no returns, some are abandoned, and others are as yet too young to yield any crop. It does not appear as if outside the western part of the island the cultivation, even if in future it should continue to expand, will ever attain that eminence which it has done in the Preanger districts. Cinchona-growing is essentially an Indo-European industry. Some twenty years ago an attempt was made by the Government to popularise the cultivation of cinchona by the natives, and thousands of young plants were sent out all over the Archipelago; but the care required in the propagation of the trees is too much for the easy-going Javanese, and they have never taken kindly to the industry. With some slight exception during the earliest years of the Government plantations, cinchona-growing has always been a "free" industry in Java. Other crops have been extended in the island under the so-called "culture system," which compelled the natives to work at fixed daily wages for the Government, to devote a certain part of their land to the cultivation of articles specially indicated by the Government, and then to sell their crops to the Government at a price fixed by the latter. Coffee and tobacco have been made into staple products by these means, while cinchona has been left to the initiative of the European growers.

#### PLANTATIONS IN EASTERN JAVA.

In Eastern Java, which embraces some of the most fruitful and also some of the wildest parts of the colony, there are at present four or five large plantations and several smaller ones, while a few have been abandoned, their cinchona-trees in some cases proving almost valueless, while in others the trees have been uprooted to make way for the more profitable coffee-cultivation. In the Kediri residency



there are eight plantations, but not one of them appears important. In Soerabaya, a residency the capital of which is the second largest, if not the largest, trading-port of Java, there are thirteen plantations, most of which are situated on the magnificent highlands of Malang, a plateau which is surrounded, as it were, by a circle of volcanoes, including the Sméroe, the highest mountain of Java, rising some 13,000 feet above sea-level, and the Bromo, an active volcano, which is regarded with superstitious dread by the Javanese as the haunt of the spirit of the Indian Sea, Ratoe Kidoel. In these rocks and in their neighbourhood numbers of edible bird's-nests, built by a species of sea-swallow, are gathered by the natives, who sell them to the Chinese, by whom they are regarded as an exceptional delicacy. On the Malang plateau, too, the best coffee is grown, and vast quantities of

sugar are also produced in this residency. In the village of Toebean in the adjoining province, near the north coast, is found what is alleged to be the largest tree in Java, a wild kapok-tree (kapok is a kind of vegetable wool, and an important article of trade), the trunk of which measures fifty feet in circumference. In the extreme east of the island, in Bezoeki and Panaroekan, three cinchona plantations are said to exist, but they have either sent in no returns or else they are not harvesting at present. The harvest of cinchona in Java generally commences about June or July, when the east or dry monsoon is at its height, and it is mostly garnered by November, when the weather changes and the north-west monsoon, with its storm-laden clouds, breaks over the island from the Chinese Sea, pouring down incessant rains until the following April.

### THE PRINCIPAL JAVA CINCHONA ESTATES.

*From returns collected by the Soekaboemi Agricultural Society, January 1, 1889.*

Name of Estate	Province and Locality	1888 Crop					1889 Crop	
		Estimated Crop. Kilos.	Estimated Quinine Percentage	Actual Crop Harvested. Kilos.	Actual Quinine Percentage	Quinine Equivalent. Kilos.	Estimated Crop. Kilos.	Estimated Quinine Percentage
Tjisella, Tjilaki	Bantam-Lebak	8,000	4	17,000	3	510	20,000	3½
Tjitrab	Batavia-Buitenzorg	—	—	10,930	5¼	574	12,000	3½
Kertamanah	Preanger-Bandong	75,000	4	80,000	5	4,000	100,000	5
Tjilaki	" "	—	—	30,000	6	1,800	37,500	6
Passir Malang	" "	50,000	4	45,000	4	1,800	65,000	4
Gamboeng	" "	—	—	20,000	4	800	—	—
Soekawana	" "	70,000	5½	93,000	5·4	5,022	100,000	6½
Telaga Patengah	" "	—	—	20,000	4	800	20,000	4
Indragiri	" "	7,000	4	17,000	4·7	799	25,000	5
Rantjawalini	" "	—	—	20,000	3	600	25,000	3
Tjipopohan	" "	24,000	4	35,000	4	1,400	25,000	4½
Sindangwangi	" Tjitjalangka	5,000	4	8,400	6	504	5,000	6
Lodaja	" "	—	—	28,500	3	855	60,000	3¾
Daradjat	" "	22,000	1·84	21,000	2½	625	30,000	2¾
Waspada	" Garoet	—	—	30,000	3	900	40,000	4
Tjiseureuh	" Tjiandjoer	38,000	4½	46,000	3	1,380	40,000	3
Bajabang	" "	—	—	28,032	4½	1,261	5,000	3½
Panjairan	" "	25,000	2	51,325	4	2,053	60,000	5½
Soekanegara	" "	80,000	5	104,000	4½	4,680	100,000	5
Tjitiis	" "	25,000	3½	18,166	3·38	614	33,000	3½
Tjiwangi	" "	25,000	3	47,000	2¾	1,293	10,000	4
Pondok Bitong	" "	18,000	3	21,000	3	630	25,000	3
Goenoeng Melati	" "	80,000	3	91,499	3·61	3,303	120,000	4
Pandang Aroem	" Soekaboemi	60,000	3	55,000	3¾	2,063	100,000	4
Paligaran	Pekalongan Betang	60,000	6	90,000	6	5,400	40,000	6
Langenardjo	Samarang Ambarawa	—	—	12,000	5½	660	12,000	6
My Bagelen	Bagelen Ledok	40,150	4	45,000	3½	1,575	37,500	3½
Gombong Ko'eh	Kedoe Temanggoeng	—	—	8,500	7	595	3,000	7
Ardiredjo	Kediri Blitar	—	—	15,000	5	750	—	—
Mangonandjero	Soerabaya Modjokerto	—	—	15,000	3½	525	20,000	4
Djoengo	" Malang	40,000	5	35,000	5	1,750	50,000	5½
Kembar Inggil	" "	—	—	23,870	3	816	62,500	3
Twenty-five smaller plantations	—	—	—	144,265	—	4,523	—	—
Fifty-six plantations send no returns	—	—	—	—	—	—	—	—
Government plantations	—	—	—	350,000	4	14,000	450,000	4
Total	—	—	—	1,676,687	4·11	68,861	2,055,900	4·15

In Japan there are thirty-one schools of medicine, four schools of pharmacy, and two schools of veterinary surgery. The University of Tokio contains 1,218 students.

**ANTISEPTIC COMPOSITION.**—A patent has been applied for (No. 15,786, 1887) for the use of mercuric iodide for preventing the formation or development of injurious germs of animal or vegetable life in substances liable to be affected thereby, such as the preservation of hides and skins, of tanning liquors, the treatment of sewage, and many other purposes.

**SIGNOR TURPURA IMPALLOMENTI** states that a 1-per-cent solution of creosote in decoction of chamomile combined with boric acid will kill gonococci in two hours. He has cured five out of seven gonorrhoea patients in six days.

**MEDICINE FOR POULTRY, &c.**—Mr. T. Campbell, Haddington, has applied for a patent for a medicine for the prevention and cure of "gapes" in poultry, pheasants, and partridges. It is administered by inhalation, and consists of carbolic acid, 11 fluid drachms; camphor, 360 grains; and powdered limestone, 13 oz.



## Trade Report.

**Notice to Retail Buyers:**—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., April 25.

**B**USINESS has been exceedingly dull this week, and a good many of the Mincing Lane dealers are still absent from the market or have only returned to-day. No public sales of drugs, drysalteries, or spices have been held this week with the exception of some unimportant auctions of varnish gums, at which no alteration of any note occurred. In the chemical market sugar of lead has been lowered in price. Tartaric acid is, perhaps, a shade quieter, and cocaine is still tending dearer. All other chemicals are unchanged. As regards drugs there is an easier feeling for cascara sagrada, but holders of H.G.H. peppermint oil are a little firmer in their demands, and insect-flowers have made a sharp advance. In the auxiliary markets there is very little stirring. Gambier, linseed oil, Zanzibar cloves, mace, and black Singapore pepper are rather livelier and dearer. Shellac is quite dull and lower, and rape oil is also easier.

**AMERICAN AMMONIUM CARBONATE.**—At a recent meeting of the Philadelphia College of Pharmacy the secretary called attention to a specimen of carbonate of ammonia of American manufacture; it is made at Detroit, and is now largely displacing the English-made article; it is packed in strong barrels and keeps well; it ordinarily sells at a slightly lower price, but has a peculiar slight odour.

**THE RAILWAY-RATES QUESTION.**—We learn that the committee appointed by the Chemical Section of the London Chamber of Commerce, consisting of Messrs. R. Barron, W. H. Francis, David Howard, Lescher, Tyrer, and Umney (of London), and Messrs. Barclay (Birmingham), Evans (Liverpool), and Wyley (Coventry), have now discussed the above subject in relation to the drug trade, and at a meeting to be holden at the London Chamber of Commerce, Botolph House, Eastcheap, on Monday next, at 2 P.M. (at which all who are interested in the subject, whether wholesale druggists, patent-medicine vendors, or druggists' sundriesmen, &c., are invited to attend), are prepared to place before the trade such points as they think necessary to be drafted for the railway companies and the Board of Trade.

We have received a copy of a memorial of objections to the proposed classification and schedule of rates issued by the London and North Western Railway Company, which has been submitted to the Board of Trade by the Birmingham Chamber of Commerce through Mr. W. F. Haydon, the secretary. It is a very important document, but relates almost exclusively to the carriage of hardware and Birmingham goods generally.

**ACIDS.**—*Citric* dull at 1s. 4½d. per lb. for English on the spot. *Tartaric* a shade quieter, at 1s. 3d. for foreign, and 1s. 3½d. per lb. for English.

**CAMPHOR.**—*Refined* selling fairly well at unchanged prices, both for English and foreign. Further sales of *Crude* Japanese are reported at 92s. 6d. per cwt.

**CASCARA SAGRADA.**—The ship *Hospodar*, which was feared to be lost, has arrived safely in London from San Francisco with 30 bales of cascara, containing not 2,000 but 4,000 lbs. On the spot the bark has been offering this week at 3s. 4d. per lb., or 2d. less than recently asked.

**CINCHONA.**—The next public sales will be held here on May 7, and promise to be very large. Meanwhile the arrivals from Ceylon are moderately heavy, while from India we have received, since the middle of the month, nearly

2,500 packages, including over 2,000 by the steamer *Glancus*. The exports from Ceylon in the periods between October 1 and March 28 have been:—1888-9, 5,900,088 lbs.; 1887-8, 4,839,561 lbs.; 1886-7, 7,497,150 lbs.

**COCAINE** reported as tending still firmer, 15s. 6d. per oz. being the lowest quotation for German.

**COPPER (SULPHATE).**—The price now runs from 24l. to 25l. for prompt stuff.

**CREAM OF TARTAR** steady, but without business just at present. On the spot the lowest quotation for first white crystals is 93s. 6d. per cwt., but for future delivery none appears offering below 93s. 6d. "c.i.f." terms.

**GALLS.**—*China* remain rather dull on the spot, at 64s. per cwt. for fair quality. For arrival there are cable offers from Shanghai at 56s. per cwt., "c.i.f." terms, steamer shipment.

**GAMBIER** has advanced. *Block* was sold just before the holidays at 25s. 6d. for delivery, but since then 26s. 1½d. has been paid for April-May, and later on 26s. 6d. per cwt. for March-April. On the spot business is reported at 25s. 9d. for landing, and 26s. for reweights.

**GLYCERINE.**—While our statement in last week's issue that double-distilled glycerine, 1,260 s.g., was offered in one quarter at 62l. is quite correct, we are asked to state that that price was quoted not for German, but for French glycerine. The German agents stick to their quotations of 65l. upwards. From Germany it is reported that holders of crude glycerine are not offering freely, as they expect shortly to be able to get better prices through the influx of American orders. Refined glycerine remains very firm, with a good demand.

**GUM ARABIC.**—Fine *Trieste* picked gums are becoming dearer almost every day, and stocks may soon be altogether exhausted. In *East Indian* gums very little is moving. From Liverpool a better inquiry for *Brazilian* gums is reported.

**HONEY.**—Large consignments have arrived this week from San Francisco.

**INDIGO.**—The latest mail reports from Calcutta say that the crop in Behar has not been doing well lately, while in Bengal rain is badly wanted for the spring crop, although the autumn sowings are doing fairly well.

**INSECT FLOWERS.**—There has been a sudden change in the position of this article, for which the buying time is now arriving. On April 18 American orders for about 600 cwts. of flowers arrived in Trieste, and the market went up with a bound. At present the quotations made by the holders are:—Open flowers, 130s.; half open, 142s.; closed, 165s. per cwt., all "c.i.f." terms; and though these figures have not actually been paid, there seems little doubt that they will soon have to be conceded, as the Trieste stock, which was only 90 tons before the American purchases, has since diminished by at least one-third. Powder is held at 1s. 5d. to 1s. 6d. per lb.

**LEAD (ACETATE).**—The convention which has existed among the German manufacturers of sugar of lead has been dissolved, and in consequence of this fact the price has been considerably reduced. Best foreign white is now offering at the rate of 21s. 6d. to 22s. per cwt. f.o.b. Hamburg.

**MUSK.**—There have been some further arrivals this week. Cablegrams from Shanghai quote untrimmed *Tonquin* pods at 43l., "c.i.f." terms, prompt steamer shipment.

**NUX VOMICA.**—There have been several small arrivals.

**OILS (ESSENTIAL).**—Reports from Southern France mention a good demand for *Lavender* and *Rosemary* oils, which are very scarce. *Clove* oil dull. The nominal quotation for English distilled is 4s. 9d. per lb. Of *Peppermint* oil (H.G.H.) twenty cases were sold some days ago at 13s. per lb., the price reported in our last issue. Since then holders, on the strength of advices from New York, have declined to go on selling on that basis, and have asked from 13s. 3d. to 13s. 6d. per lb.

**OIL (OLIVE).**—There is a very limited demand, both in London and Liverpool. *Mogadore* is selling slowly here at 31l. 10s. to 32l.; *Spanish*, quoted nominally at 35l.; *Sicilian* at 34l. Reports from the producing countries show no



alteration. From Tunis and Morocco there are hardly any shipments to England, as the prices ruling here offer no inducement. In Spain the Seville market keeps firm, owing to large exports to the States and increased local consumption, but in Malaga oil is rather lower.

**OILS (VARIOUS).**—The following are to-day's spot quotations:—*Cocunut* quiet; Ceylon, 25*l.* to 26*l.*; Cochin, 27*l.* to 28*l.* *Cottonseed* without-change; crude, 22*l.* 5*s.* to 22*l.* 10*s.*; refined, 24*l.* to 25*l.* 10*s.* *Linseed* dearer at 18*l.* 10*s.* to 18*l.* 12*s.* 6*d.* *Palm oil* dull at 24*l.* 10*s.* to 25*l.* for fine Lagos. *Petroleum*, American, 5½*d.* to 5½*d.*; Russian, 5½*d.* *Rape oil* lower; brown, 24*l.* 10*s.*; refined, 26*l.* *Turpentine* flat; American spirits, 33*s.* 9*d.* per cwt.

**OPIUM.**—Trade here is at a standstill. The market for Persian opium is reported to be rising in China.

**QUICKSILVER.**—Quiet and without change, at 8*l.* from the importers, and 7*l.* 17*s.* 6*d.* in second-hand.

**QUILLAYA** remains firm, with sales at 14*l.* to 14*l.* 10*s.* per ton.

**QUININE.**—The market remains quiet, no business of any importance having yet been reported since the holidays. German bulk offers at 1*s.* 1½*d.* per oz. on the spot, and 1*s.* 2¼*d.* per oz. for forward delivery.

**RHUBARB.**—The arrivals are small; only one of the several Chinese steamers which have arrived this week has brought any, and that a consignment of only 26 cases. A cablegram from Shanghai received on Tuesday quotes "Shensi 1*s.* 8*d.* per lb. c.i.f. steamer."

**SHELLAC** has been very flat this week, and prices have declined, no business being transacted in the "ring." To-day's quotations there were as follows:—

	April	May	June	July	Aug.
	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>
Second orange TN sellers	—	71 0	70 0	70 0	70 6
„ buyers	—	65 0	65 0	66 0	65 0
Garnet AC sellers	.. 56 0	56 0	56 0	56 0	58 0
„ buyers	.. 53 0	54 0	54 0	54 0	—

**SPICES.**—*Arrowroot*: St. Vincent, in barrels, is said to have been sold at 2½*d.* to 2½*d.* per lb. Zanzibar *Cloves* have become firmer on the spot, and a good demand is reported to-day, with sales of fair to good fair at 6½*d.* to 7*d.* per lb. and further buyers. *Mace* also more inquired for, with business in fair to good wild Bombay at 9½*d.* to 11½*d.* per lb. *Black pepper* rather steadier, with business in Singapore at 6½*d.* for April to July shipment. *White pepper* has been dealt in at 8½*d.* for Penang and 10½*d.* per lb. for Singapore on the spot.

**TEA.**—The China market is more active than is usually the case in a holiday week, especially at Easter, and there is a firm tone for lower grades. The only sales for the week were Thursday's, consisting exclusively of Newmakes and scented teas. The former sold steadily, and the latter without much alteration for capers, but a few undesirable scented orange Pekoes sold at lower rates. Privately, common teas are firm to dearer, teas for price being wanted, and nothing offering in clean-leaf tea, Moning or Kaisow, under 4¼*d.* It is probable we may have a steady market for these sorts for a few weeks, though it is not likely that there will be any serious rise in prices of common grades. A few better Congous—chiefly Monings—have exchanged hands at about previous quotations. The Indian and Ceylon markets have been almost closed during the week, with only a few small catalogues on Thursday. Lower Assams, leaf and broken, sold steadily, but the Ceylons offering did not meet with much competition, and a considerable quantity was withdrawn. Buyers are probably keeping themselves for the heavy Ceylon sales advertised for next Thursday.

**WAX (BEES').**—Some improvement in the demand is reported, with slightly better prices.

## THE AMERICAN MARKETS.

NEW YORK, April 12.

**D**URING the week the two leading articles of our market, quinine and opium, developed a firmer feeling, and although the jobbing trade is very dull for all kinds of drugs,

it is thought that if the improvement continued in the two mentioned an active market would soon result.

(The price in parentheses in sterling is the equivalent of the New York price, London allowances being taken into account.)

**BALSAMS.**—Seventy cases *Copaiba* arrived from Carthage and were readily taken by dealers here at 50c. (2*s.* 2½*d.*) Further supplies are expected. *Canada* has declined to \$2.50 (1*s.* 4½*d.*). There is no demand for export. Stocks are not large. *Tolu.*—Twenty-five cases arrived; 29c. (1*s.* 3¼*d.*) would readily buy.

**CASCARA SAGRADA.**—There is very little doing in genuine bark, as stock is small. For future delivery offers are solicited at 15c. (8*d.*) for October shipment, but buyers hold off, expecting lower rates.

**GUM CHICLE** has declined to 32c. (1*s.* 5½*d.*), owing to large arrivals.

**LEAVES.**—*Coca* are getting scarce; there are no Huanuco offering, and for sound light green Truxillo 20c. (11*d.*) is now asked. *Damiana* is in good supply at 17c. (9*d.*), *Jaborandi* offering only from second hands at 14c. (7½*d.*), *Matico* scarce. *Piehi.*—This new drug receives considerable attention; sales are reported at 75c. (3*s.* 2*d.*). A parcel is reported on the way.

**OILS (ESSENTIAL).**—*Peppermint.*—This article is still weak and depressed for lack of demand. The stock of the HGH brand is smaller than usual, but, being no longer a speculative article, it attracts little attention; to-day \$2.90 (13*s.*) is the price named for small lots, but it is doubtful if any quantity could be had at that. *Spearmint.*—The low price attracted some attention, all the cheap lots being quietly absorbed; \$2 (9*s.*) is asked now for bulk, and \$2.50 (11*s.*) for the HGH brand.

**OPIUM.**—There is a speculative movement in this drug, and slightly higher rates are quoted. The druggists take mostly the "pudding" kind, and for this \$3 (8*s.* 9*d.*) is paid. The total stock in the States is smaller than this time last year.

**QUININE** has decidedly improved, B & S is selling for 27c. (1*s.* 2¼*d.*), and other good German brands 26c. (1*s.* 1¾*d.*). Makers have ceased to offer in quantity for forward delivery, and as large orders are in the market unfilled, it is thought a further improvement may take place. The Philadelphia makers are full of orders at full prices, and are getting behind with their deliveries.

**ROOTS.**—*Jalap* is weak, a parcel of 10 bales inferior sold from first hands at 10c. (5½*d.*); 80 bales remain unsold. *Golden seal* steady at 35c. (1*s.* 6¼*d.*). *Senega* has been active, sales reported of 5,000 lbs. for export at about 52½c. (2*s.* 4*d.*). The stock is greatly reduced. New crop may be expected in July-August. *Serpentaria* neglected at 21c. (11½*d.*).

**TONQUIN BEANS.**—Pará have further advanced to 90c. (3*s.* 10½*d.*) for good; they are very scarce.

## THE DUTCH MARKET.

AMSTERDAM, April 24.

**CINCHONA BARK.**—The sales in Amsterdam on May 2 will consist of 2,244 bales and 95 cases, about 1,865 tons, viz.:—*Java Bark* from Government plantations, 410 bales and 31 cases, about 35 tons; private, 1,834 bales and 64 cases, about 148 tons. *East Indian bark*, 37 bales, about 3 tons 5 cwt. This quantity is made up as follows: *Druggists' Bark*: *Succirubra* quills, 62 cases; broken quills and chips, 348 bales 24 cases; root, 57 bales 2 cases; C. Schuhkraft quills, 7 cases; broken quills and chips, 41 bales; root, 6 bales; *Lancifolia* broken and chips, 6 bales; root, 2 bales; *Manufacturers' Bark* (about 147½ tons): C. *Officinalis* broken quills and chips, 35 bales; C. *Ledgeriana* broken quills and chips, 1,402 bales; root, 261 bales; Hybrid broken quills and chips, 67 bales; root, 19 bales. Manufacturers' barks contain about 6 tons of sulphate of quinine, or 4.1 per cent. on the average. About 11½ tons contain 1-2 per cent. of sulphate of quinine; 35½ tons, 2-3 per cent.; 47½ tons, 3-4 per cent.; 15½ tons, 4-5 per cent.; 7 tons, 5-6 per cent.; 21 tons, 6-7 per cent.; 3½ tons, 7-8 per cent.; 6 tons, 8-9 per cent.



## CINCHONA-PLANTING IN CEYLON.

THE Ceylon *Times* discusses the ever-green question of the future of cinchona in Ceylon in its issue to hand by this week's mail. With regard to the heavy shipments of bark this season, our contemporary says:—"We confess that we are unable to account for the largeness of our export to date this year, except on the supposition that Colombo stocks have been greatly depleted to swell shipments. How otherwise we could put 5,000,000 lbs. of bark on board ship between October 1 last and the end of February we cannot understand. However, we do not see how we are to work up to as much as 10,000,000 lbs. to the end of the fiscal year. We look for no sudden drop in our cinchona shipments now or hereafter, but rather anticipate a steady decline year by year, to which this year, notwithstanding the present increase to date, will be no exception. The writer has recently been through Dikoya, Bogawantalawa, and the Agras, and only in the latter was any considerable cover to be seen, and even there the trees were mostly small and immature. In the Agras and on a few Bogawantalawa estates there were of course a large number of trees scattered throughout the tea or coffee, some the slow-growing survivors of plantings which took place years ago, and others mostly self-sown; but all were small, and could yield but little bark. In the Agras, clumps of very fine cinchona are to be seen almost everywhere, and we suppose that nowhere in Ceylon, except perhaps in Madulsima or Udupussellawa, can such a show of growing cinchonas be seen. But when we compare this to what was the case five years, or even ten years, ago, the present outlook is very different. Then every district counted its trees by the million, from Matale to Rakwana; now all the districts are bare except those mentioned above, from which alone must our future supplies be drawn. But it seems impossible to bring this home to the trade. That they are entirely ignorant of the true state of the case is proved by the present position of the market; for, if the unit of quinine was worth 20c. in 1886, say  $3\frac{1}{2}d.$ , it is worth more than 10c., or  $1\frac{1}{2}d.$ , in 1889. This discrepancy can only be brought about by one cause, and that is an alarmist idea as to the possibilities of bark production in Ceylon, which it is our duty to allay as much as possible. Only the other day we received a letter from a well-known firm of bark purchasers at home, making private inquiries as to the real position of affairs, in the course of which the opinion of a Colombo firm was given that 'Ceylon bark exports might be doubled, or even trebled, for a series of years if prices went up to 3d. or 4d. a unit again.' It is such statements as these that are chiefly responsible for the serious fall which has taken place in the value of quinine."

## Notes on Books.

Mr. Samuel Rideal, D.Sc., &c., provides in his "Practical Organic Chemistry" (H. K. Lewis) a good collection of tests for organic acids, carbohydrates, organic bases, neutral substances, &c. The chapters are arranged in this order, and are preceded by an introductory chapter dealing with the detection of organic carbon, nitrogen, and the other elements which are commonly found combined in the organic carbon compounds. Such of the substances as are contained in the British Pharmacopœia are treated from that standpoint. We should have liked if Dr. Rideal had in all cases taken cognisance of pharmacopœial methods. Thus, he states that acetic ether is dried over fused chloride of calcium—a most wasteful process, which led the Pharmacopœia authorities to give preference to dried potassium carbonate. The chapter on alkaloids is good. Those mentioned are quinine, cinchonine, morphine, brucine, strychnine, atropine, cocaine, and conine. A good variety of tests is given. We miss under atropine one of the most delicate tests which have yet been proposed, and which we owe to Mr. A. W. Gerrard, viz.,

the one based on the reaction of an alcoholic solution of the alkaloid with mercuric chloride, the metallic oxide being precipitated. The author might complete the list of alkaloids by adding codeine, cinchonidine (much more important than cinchonine), and hyoscyamine. The book contains a considerable number of reactions which are new to English literature.

The Flora of India is so rich in medicinal plants that, like China, it has always been a fruitful field to pharmacognosists. Ainslie, O'Shaughnessy, Waring, and Dymock, amongst our English writers, have all been enamoured of the *Materia Medica* of the empire, and have given us the results of their labours in more or less tangible form. To Dr. Dymock undoubtedly belongs the credit of giving us an enlarged acquaintance with the richness of Western India in medicinal products. It is with peculiar pleasure, therefore, that we learn that he, in conjunction with Dr. C. H. Warden and Mr. David Hooper, is engaged on a history of the principal vegetable drugs of India, which is to be appropriately entitled *Pharmacographia Indica* (Trübner & Co.). It is seldom that we have such a combination of talent in the production of a work of this kind. Dr. Dymock represents the botanical and medical sides, Dr. Warden the chemical, and Mr. Hooper the pharmaceutical. All, as Government officials, have exceptional opportunities for obtaining information, and their knowledge of the country and its inhabitants will add greatly to the value of the work.

"The Metallic Alloys," by Mr. William T. Brandt (London: Sampson Low, Marston, Searle & Rivington, 12s. 6d.), is a practical guide for the manufacture of all kinds of alloys, amalgams, and solders used by metal-workers. It gives a good account of the chemistry of the metals and their alloys, but the really valuable part of the book to those whom we address, and especially those who do dental work, is that which treats of the manufacture of amalgams and alloys of the richer metals. This is thoroughly practical.

One of the most useful little works for dressers and nurses is Mr. Walter Pye's "Elementary Bandaging and Surgical Dressing," a third edition of which has just been published by John Wright & Co., of Bristol. The information which it contains is exceedingly valuable in cases of emergency. The author truly says that it is "a very little book," but it is large in usefulness.

The Illinois Pharmaceutical Association send us the report of their proceedings at the ninth annual meeting, held at Illinois under the presidency of Mr. Henry Smith in August last. The business was mainly of local interest, and included five papers, one of which, "On the Division of Powders," we have already referred to.

Messrs. Kelly & Co., the well-known directory publishers, have just issued a "London Medical Directory" (4s. 6d.). The names of practitioners, their qualifications, appointments, or literary achievements are given in the same style as is adopted in Churchill's "Medical Directory." The limitation of the list to London and the surrounding district of course lessens the bulk and the cost of the book considerably; but it correspondingly lessens its usefulness also. The additional information, including lists of hospitals, medical schools, societies, publications, registrars, nurses, analytical chemists, surgical-instrument makers, &c., is convenient, but it is of varying degrees of accuracy. The list of analytical chemists, for instance, is only approximate, and the absence of all the homœopathic institutions from the list of hospitals, schools, societies, and publications, and of all such appointments under the names of practitioners, looks like "malice prepense." It is at any rate a serious fault in a directory.





### Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish: if you do not, please use a distinctive nom-de-plume.

Write on one side of the paper only; and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulæ consult the last volume, if you have it.

Letters, queries, &c. will be attended to in the order received.

### Sandal-wood Oil, Sp. Gr. 0.945.

SIR,—As you invite the opinion of English distillers on this subject, we beg to hand you the following particulars of specific gravities taken at 15.5° C. in a 50-e.e. bottle.

We find the bulked results of twelve distillations to be:—

0.9782	0.9767	0.9775	0.9787
0.9760	0.9780	0.9771	0.9773
0.9779	0.9789	0.9779	0.9799

The first hour's lowest gravity we have found to be 0.9642, which had increased to 0.9750 at the end of four hours, 0.9776 for the first day, 0.9781 the second day, and 0.9857 at the final.

We do not find much difference in the colour of the oil between the first and last runs, and note that the more pungent odour of the latter (immediately after distilling) is greatly toned down after standing twenty-four hours.

Being satisfied that the gravity does not go under 0.964, we should have no hesitation in rejecting a sample having 0.945, and should always look upon an oil between 0.970 and 0.980, preferably 0.978, as being correct.

It is likely that the error made in the gravity by the U.S.P. arises from an article by P. Chapoteau (*Bull. Soc. Chim.*), and reproduced, *J. C. S.*, 1882, and *J. C. S.*, 1883. An error in the opposite direction is found in the "National Dispensatory," which gives the gravity as 0.960, and as occasionally heavier than water—a result we have never been able to attain.

Of course we are only now writing on the oil distilled from fine East India wood, and we have no knowledge of the specific gravity of either West Indian or Australian wood oil.

It is a pity that an oil so largely used should have so much uncertainty (in books) as regards its gravity, which, as above shown, is so constant, and which it would be well to fix for medical uses.

We are now conducting exhaustive experiments at our works on its optical and chemical properties, the result of which we hope to publish shortly, having chiefly in view the manner in which to detect the adulterants so largely added to this oil, and whereby it will be easy for persons of limited chemical knowledge to prove falsifications.

Mitre Square, Aldgate, E.C. HORNER & SONS.  
April 24.

[Messrs. Horner & Sons being very large distillers of sandal-wood oil, their communication is an important one, and, it will be noticed, their figures confirm the statement made by us last week in regard to the specific gravity of genuine oil.—ED. C. & D.]

### The Medicine-stamp Act—What is wanted?

SIR,—The concluding sentences of the editorial in your last issue take the form of a challenge, which I ask leave to accept, promising that my proposal shall be as definite as I can make it—of its reasonableness others must judge.

From the schedule to which the Act 52 Geo. III. cap. 150 refers, omit all those words of the paragraph described as "the general charge of duty" which follow from and after the words "great seal." The paragraph is quoted on p. 53 of

Mr. Alpe's Handbook, to which I would ask your readers kindly to refer. It will then become clear to them that, as the result of this omission, of the six general causes of liability three only would remain. The duty would be chargeable on—

Secret remedies.

Proprietaries in which an exclusive right to title was claimed.

Medicines actually patented.

The class of nostrums or proprietary medicines would continue liable to taxation only in so far as secrecy of composition was maintained, or any claim to exclusive right or title set up. But—

The use of the term "specific," and the recommendation of a medicine as beneficial to the prevention, cure, or relief of any distemper, &c., would no longer be dutiable.

If it is objected that specifics do not really exist, and therefore, I suppose, require the sanction of the Government stamp to reinforce their shadowy authority, I turn to a book which, perhaps more than any other, embodies recent advances in therapeutics, and quote from Martindale and Westcott's "Extra Pharmacopœia" that cannabin tannas is described, on the authority of the *British Medical Journal* as the remedy for menorrhagia; or I turn to the "Notes on Drugs," issued by so eminently respectable a firm as Messrs. Corbyn in 1884, and find Ccto bark described as a specific against diarrhoea; on the next page eriodietyon is spoken of as a specific for lung diseases, while the importance of mercury as a specific remedy for syphilis is plainly insisted on in so good and modern an authority as "Quain's Dictionary of Medicine."

If, on broad grounds of public policy, there is any cogent reason why Mather's plasters, for instance, should be taxed more than Fry's eoeoa or Horrocks's longcloths, it would become necessary to remodel the latter part of the charging clause, so as to allow plasters spread by Mather to pass unchallenged, but to prohibit the use of the pernicious possessive case; but I fail to see why, as long as it stands for a simple and literal fact, the term Jones's aperient pills should be penalised more than Borwick's baking-powder.

The simplicity of the Act as thus amended would be the foremost recommendation. It would be as clear as noontide sunshine that, to escape the tax, a medicine must be truthfully labelled with its correct name if a simple, or a candid statement of its composition if a compound, and bear the name and address of the maker, for the purposes of business convenience and legal responsibility.

Bogus statements of composition—to evade the law—would be promptly dealt with by the staff of analysts at Somerset House who now advise the Board on the claims of simple drugs to exemption.

So, too, any claim to exclusive right or title by its very nature would be speedily and surely recognised. The justice of the change is the next recommendation. To all makers who cherish a secret or claim an exclusive title Parliament might well say, "Your monopolies shall be respected, on condition that you continue to contribute to the revenue; since, from the nature of the position you have taken up, you can have no difficulty in charging the amount of the tax on the consumer."

But the pharmacist, who seeks public favour only on the ground of merit, without any such adventitious aids, is surely entitled, like other craftsmen, to follow his calling without fiscal let or hindrance.

The present Act is totally at variance with the liberal principles which govern modern commercial legislation; and, according to its literal tenour, it is difficult to imagine how it can ever be possible to sell any untaxed medicine. So enormously wide is the sweep of the net that any chemist who had ever been incautious enough to leave a printed or written record of having recommended compound rhubarb pills for the relief of constipation is liable to a 10% penalty for every pennyworth which he may at any time sell. It would appear as though a desire to minister to one's suffering fellow-creatures were a crime more stringently guarded against than high treason: there is a place of repentance found for the one, but no statute of limitations avails for the other.

Since the existing Act operates not only in restraint of trade, but as a tax upon knowledge, the change proposed would help forward the spread of enlightenment. The in-



roduction in great number and variety of new remedies has uncontestedly been a leading feature in the progress of medicine during the last quarter of a century, and information respecting these is often earnestly sought for by the public. Many efforts are made, notably by the editors of popular periodicals, to supply this want, with results often laughably grotesque. Yet the man best qualified by education and training is debarred from doing so, at least in printed or written form, lest he should incur for every pennyworth of the article which he may in the future supply the burden of a threehalfpenny stamp.

Again I make use of Messrs. Corbyn's "Notes" to illustrate any meaning, and ask whether any possible evil is to be apprehended from the sowing broadcast among the public of such information as the following:—"Oleum Hyperici.—This oil, prepared from the flowers of the St. John's wort, has been recommended by Dr. H. L. Snow as an application for bedsores, &c."?

No doubt the ideal form of treatment for every ailment, from the least even unto the greatest, is that it should be diagnosed by a regular practitioner, whose prescription should be dispensed by a pharmaceutical chemist; but the public demand, I think, to a steadily increasing extent, medicines which lend themselves to a home-made diagnosis, by an accompanying description of the complaints for which they are suitable. Since this demand is certain to be met in some way or other, it is better that it should be by the honest exercise of pharmaceutical skill rather than by the arts of the charlatan and the quacksalver.

I venture to believe that the amendment of the Act which I have sketched would limit its operation to its original intention, materially assist us in the difficulties under which we labour, and tend in many ways to the public good, mainly by drawing a distinct line of demarcation between two different methods often unjustly mistaken for each other.

Yours very obediently,

Market Square, Dover, April 22.

J. F. BROWN.

SIR,—In your leader of April 20 you ask, in relation to stamp-duty reformation, "what is wanted?" At the Newcastle meeting, which opened the present agitation, I gave expression to the want as being either repeal or such revision as would make the law intelligible. Dropping for the present the former alternative, and some minor points which would come in as riders to the latter, I will confine myself at present to the question of intelligibility. On this point you give a somewhat oracular support to the opinion of the *Pharmaceutical Journal*, that it is scarcely creditable to chemists to have to confess that they do not understand the law. Presuming, therefore, that you find the law intelligible, you would confer a favour upon me, and I think upon others of your readers, if you could give clear answers to several points in my letter to the *Pharmaceutical Journal* of April 13, which the editor of that journal has not as yet replied to. The points are:—

(1) Wanted the letter of the law which declares that "the possessive ease of a proper name preceding that of a medicine constitutes it a proprietary medicine."

(2) Do the labels "Fowler's solution" and "Friar's balsam" involve stamp-duty?

(3) If a label was declared to involve no liability some time ago, can it be held to involve liability now?

(4) If a label is now declared to involve no liability, will it, in the absence of a new Stamp Act, be exempt ten years hence?

Newcastle, April 22.

BARNARD S. PROCTOR.

[We did not intend to write oracularly, and the essence of our remarks was to the effect that by studying the Act itself, the various legal decisions which had been given on it from time to time, and Mr. Alpe's commentary on it, there is not much difficulty in arriving at a general comprehension of its provisions, and of the interpretation put upon these by the administrators of the Act itself. But besides this, we pointed out that in any specific cases submitted to them, the Board of Inland Revenue are willing to state whether a certain label does or does not render a certain preparation liable to stamp-duty. Is there any other Act of Parliament in existence of which all this could be said? Of course we admit that it is often possible to disagree with the view held by

the Board, while there may, too, be excellent arguments against the whole Act or against parts of it; and these we do not wish to suppress. What we protest against is the semi-heroic and often purposeless, and sometimes baseless, strain in which not unfrequently the Act and its administrators are declaimed against. We have no special authority to answer Mr. Proctor's questions, and we do not suppose they are put with that earnest desire of obtaining information which should characterise the inquiries put to an oracle. But we confess we do not think them a very difficult lot to dispose of. We do not understand that the possessive case before the name of the medicine constitutes more than *prima-facie* evidence of proprietorship; we believe that conclusive evidence of common property in an article would outweigh the possessive case, and in this view we are supported by the opinion which we obtained on this very point from Mr. Finlay, Q.C. The term "Friar's balsam," as applied to the compound tincture of benzoin of the B.P., is not considered by the Board to involve liability to duty. This is stated by Mr. Alpe on page 50 of his "Handy-book." The title, "Fowler's solution," would not involve liability if applied to the preparation so named in the Pharmacopœia. That is our opinion, and hence has only the oracular value which Mr. Proctor may choose to give to it. Questions 3 and 4 are of the academic character which we deprecate; but it does not need an oracle to prophesy that if the Board of Inland Revenue were to prosecute a medicine-stamp case, and the defendant could produce a letter from the Board declaring that the preparation was not liable, the case for the prosecution would become, in the absence of some evidence of different circumstances, what is technically known as "dickey."—ED. C. & D.]

#### Commercial Travelling.

SIR,—As a commercial traveller in Ireland, I should like to say a few words in reply to "Manufacturer's" letter in your last issue. My experience, extending over a number of years, has been that retailers greatly like to be called upon by the representative of the wholesale house with which they do business, whether in drug or druggists' sundries line, especially if the traveller carries samples. He has all the newest articles and preparations introduced to his notice, their usefulness and virtues explained to him, and often much information brought to his knowledge which he might not otherwise obtain. I have often been thanked by customers for information imparted to them as to the best market for buying specialities, &c., which meant the saving of many pounds in the year. I take it that a proper representative should be a mutual help to both employer and customer. Having been a buyer in a wholesale house I have always found it much more satisfactory to buy from the manufacturer's traveller than by letter. There may be special circumstances to be considered and explained, which is not always easily done by letter; for instance, an article having been contracted for to be supplied to some public institution. The representative finds what quantity you can take and meets you in price to supply your contract, whereas it has been my experience, when you write for quotations you are quoted fixed prices, without any regard being paid to special circumstances. I shall be eager to see opinions expressed on this subject by others interested.

Yours,

ANGLO-CELT.

#### Openings in Australia.

SIR,—As an o'd voyager to the colonies you must allow me to reply to "A Country Chemist's" letter from South Australia, and I have no doubt that it will carry the more weight if I quote from a letter received from my old chief, Dr. L. R. Huxtable, who now holds a very important post on the N.S.W. Government Medical Staff in Sydney. The letter was in answer to one in which I told him of my going into business here, and it reads thus:—

"I am glad to hear from you again, and to know that you are doing something on your own account, which is in every way more satisfactory than the holding of any appointment, however attractive. But had you elected to do on this side of the world what you are doing in England your remuneration would have been infinitely larger in proportion to the



capital and energy you put into your business. On one of those rapidly-growing mining-fields, such as Broken Hill, Gympie, or any one of the many others, your prospects of success financially would have been limited only by your own enterprise, while in the old country the ground is already so much occupied and competition so keen that little more than a modest return for money invested and energy expended can be hoped for. My own idea for you had you returned to this colony would have been what I have hinted at above, and it is quite certain that the means you have found to invest in a business in England would have yielded you a hundredfold more here. But there are, of course, climatic questions and questions of taste, which are also to be considered in your own as in every case. It is only the man who is possessed of health, self-reliance, and pluck who could hope to reap all that is offered by such a field."

This quotation speaks for itself; but why did I not return to the "El Dorado" here spoken of? Because my friends would not find the means to try a business in Australia, and I think it better to be a master here than an assistant out there.

Your correspondent's gloomy outlook may apply to South Australia, and, from my four flying visits to Adelaide, I should say he speaks truly, but "*c'est une autre chose*" in speaking of New South Wales and Victoria. I have made long stays both in Sydney and Melbourne, and know many leading chemists in those cities, also smaller chemists up country, and have friends among the assistants in the colonies; I never heard such accounts of business, and, judging from the success of one friend in particular, I should say there is no such thing in these favoured countries. This friend landed with 20*l.* and a wife and family, obtained at once a berth at 4*l.* per week. In six months he had prospected the suburbs of Sydney, and pitched with his 20*l.* and an advance of drugs from a wholesale firm in a seemingly unlikely spot. In two years he was able to fit and stock a handsome shop in a better neighbourhood, and now carries on both successfully.

I am, dear sir, yours truly,

FRED. E. JOHNSON, M.P.S., N.S.W.

Halesworth, Suffolk, April 22.

#### Liq. Ammon. Acet.

SIR,—I am very pleased with Mr. Proctor's able paper, and made my last lot of liquor with the book open before me, and found the lead test very simple and useful in deciding when the solution was neutral. Mr. Proctor properly points out that the ammonia must all be in solution before beginning to test.

I was lucky enough to notice the B. P. directions to produce liq. ammon. acet. the first time I used the book, and marked the margin so that any coming after me should not read it off at first sight "1 part and 5 parts," instead of "1 part made up to 5."

Is there any reason why glacial acetic acid should not be neutralised with liq. ammon. fort., and made up to proper strength?

I am, yours truly,

H. E. C. (35,52.)

#### Some Suggestions for Success.

SIR,—With reference to "Marinus's" appeal to me as to the get-up of my proprietaries, &c., I have avoided unnecessary expense as much as possible, wrapping them in various coloured papers, and invariably using a black and white label on ordinary bottles. The most successful preparations are the following, given in the order of success:—Toothache preparation, neuralgia mixture, three different kinds of cough mixtures, blood compound, hop compound, iron tonic, female pills, ringworm lotion, &c. All the above-named articles sell well. Several other articles that I have sold far better than any patents which I stock. I ought to have mentioned that during the winter months my chilblain cream sells well, and tonic saline during the summer months. No cold cream but my own is ever asked for now, so well satisfied are my customers with it. It is prepared according to the formula in THE CHEMIST AND DRUGGIST. Marking-ink, according to the same authority, gives thorough satisfaction. Cucumber cream sells well, other makers completely supplanted.

Several kinds of tooth powders, pastes, and washes. I am still adding to my list of proprietaries. I sympathise very sincerely with "Marinus," but I know no one can live on sympathy. Therefore, to show him that my sympathy is genuine, I beg to tell him that if he will communicate with me through the Editor I will send him specimen-labels accompanied with recipes for three or four of my leading specialities.

The correspondence columns of your valuable journal are producing an immense amount of good, though there is a good deal of wailing; yet I find there are very many "Hopefuls" besides myself who have battled successfully with the patent-medicine "bogey." I can confirm every word that "H. E. C." says in your last issue. Success to the craft, say I.

April 23.

Yours faithfully,

HOPEFUL.

#### The Wholesale Trade in Patent Medicines.

SIR,—Fearing that your report, four weeks since, of the meeting of the wholesale traders in patent medicines may lead to some misunderstanding of my position in the controversy, I hope you will allow this letter to appear. I wish to state that I have not signed the articles of association, nor do I approve of the objects of such an association, so far as I am acquainted with them. I have never seen any ultimate good come out of similar arrangements, and the artificial prices which result from such combinations are almost certain to render it more difficult for small buyers throughout the country to compete with the great stores. I attended the meeting with the object of seeing what proprietors came to it, and to hear their views on the subject. I certainly should be surprised if any proprietor would put himself entirely into the hands of a few wholesale houses associated for the purpose of controlling the sale of his goods, which is practically what the association aims at.

I will be no party to agreements which may be evaded by those who clamour most for them, and which will certainly strike at the small buyers. Only within the past ten days my firm have been boycotted by a manufacturer because they would not agree to charge a man who could only buy one piece at a time 50 per cent. more profit than the man who is enabled to purchase six pieces; as an inducement to sign the agreement we were told that all the other houses in the trade had already done so. They declined, saying they respect their friends who are in a small way too much to forget their interests. Possibly the boycott can be broken, even if the firm should sustain a loss.

Yours faithfully,

SAM ROBERTS (MAY, ROBERTS & CO.).

#### The Patent-medicine Trade.

SIR,—We are close to a "big store," and sell patents on a shred of profit. We push our own articles, such as chlorodyne, cough medicines, perfumery, emulsions, pills, liniments. In short, we boycott the patent-medicine proprietors. "H. E. C." very properly says that the chemist is an educated man, and as such he ought to be able to produce better compounds than are usually sold with an inland revenue stamp, the bulk of these being the result of neither education nor skill. They are foisted upon a gullible public by means of startling advertisements. The grey matter of the brain has become an important item in the settlement of this question: "What are chemists to do with patent medicines?" The chemist should remember that, like the fiddler who made his fiddle out of his own head, he too may make a select collection of his own preparations, the strength and quality of which he can vouch for, and sell them at prices which cannot fail to secure purchasers. Chemists need not mourn the loss of their departing friends the patents. Most of us make 5 per cent. profit by selling them, whereas, by business tact and energy, we can supply their place to the tune of 60 to 75 per cent.

I am, yours truly,

April 23.

ANTI-PATENT. (266/25.)

#### Sale of Medicated Wines.

SIR,—It is to be hoped that the Inland Revenue authorities may see their way to give effect to the petition of the Liverpool Chemists' Association in the matter of imposing stamp duty on medicated wines.



Chemists in Scotland seem to be placed in even a more unfortunate position than their brethren in England in regard to this matter. From decisions recently given in Aberdeen and Glasgow, it will have been observed that the authorities are averse to granting wine licences to chemists in Scotland on account of their keeping open shop on Sunday. Now, so far as my experience goes, Sunday is the day on which the greatest necessity arises for a chemist holding such a licence, for should a prescription come in for, say, vin mariani, the chemist must needs send to the private residence of some licensed dealer, and the delay thus experienced is annoying to the chemist, and may be injurious to the patient.

The easiest way out of the difficulty, both for England and Scotland, would seem to be the imposition of stamp duty.

Yours faithfully,

April 24.

SCOTUS. (266/26.)

#### Paper Filters.

SIR,—I find the following answer for a strong filter, and moderately rapid: Fold a piece of muslin (same size as the filter-paper) outside the paper. This supports and prevents the filter from bursting, which it otherwise would do when an energetic junior or apprentice begins pounding on the same counter that the filter is on.

The following is a very rapid filter, and tolerably strong:—Fold a filter-paper into pleats, and taking the point in your thumb and finger, gently twist it round; at the same time turn the filter-paper inside out, and place in the funnel one sent as sample. This tip was sold to a friend of mine for 3d. by a wandering and homeless chemist and druggist.

I am, yours truly,

H. E. C. (35/52.)

#### MISCELLANEOUS INQUIRIES.

*A large number of correspondents ask us for formulæ and other information already published in this journal. It is not fair to more careful readers that we should frequently repeat such information, and so long as the back numbers containing the formulæ or replies required are in print we must decline to do so. Back numbers of our weekly issue can be obtained from the publisher at 4d. each.*

*Correspondents who have made inquiries regarding the following subjects will find the information in the numbers indicated.*

32/64. **Glycerine and Honey Jelly.** June 23, 1888, page 799.

34/59. **Walnut Pomade.** January 28, 1888, page 112.

34/60. **Spero.**—(1) We do not know of a preparation for thinning the hair. (2) **Seltzer Powders for Gazogene** (5 pint).—Bicarbonate of soda, 15 grains; carbonate of magnesia, 6 grains; chloride of sodium, 80 grains. Mix.

32/2. **Glasgow.**—**Haustus Calumbæ Alkalinus.**—St. Bartholomew's Hospital Pharmacopœia: Bicarbonate of soda, 10 grains; tincture of calumba, 20 minims; infusion of orange-peel, to  $\bar{3}$ j. Mix.

34/30. **A. R. & Co.**—You will find a formula for **Depilatory Powder** in the DIARY, page 172. This may be made into a cake with alcohol, pressed into a mould and dried. For **Paste Depilatory** try the following:—

Hydrosulphuret of barium	..	..	2 drachms
Quicklime	..	..	8 "
Soap	..	..	2 "

Lard, a sufficiency to make a paste.

Perfume with essential oil.

It is not possible to have a depilatory in liquid form.

35/69. **T. W. Peck.**—See our advertisement pages of last week.

34/5. **W. B. R.**—It is not possible to put a permanent smooth surface on the leather covers of chairs which have been worn. The only thing that can be done is to give them a rub with furniture-oil, followed by the application of size.

34/66. **Gurjthon.**—**Gripe Drench** (DIARY, page 270).—The drench will keep perfectly if put up in dose bottles with 1 oz. of spirit of nitrous ether.

35/70. **Aspirer.**—Yes. See our Educational Number, and an article in our issue of February 9, page 202.

34/40. **Balsam.**—We can say nothing regarding your samples of wax, copaiba, and dried sodium carbonate without analyses, and we cannot undertake analyses of any kind which are not likely to yield information of benefit to our readers generally. We regret, therefore, that we cannot express an opinion on the samples which would affect the matter between you and the wholesale house.

33/45. **Minor.**—If you refer to page 37 of the "Art of Dispensing" you will find a note on ferrum tartaratum, which will explain the matter to you.

263/9. **W. J. C.**—There is really no better way of boring glass with the hand than the use of a little camphorated turpentine along with a hard-tempered file.

33/2. **Nunquam.**—You have doubtless seen the formula for glycerine suppositories in last issue, page 559.

33/9. **Sealing-wax.**—We do not suppose that there is a sufficient number of makers of sealing-wax in the kingdom to support a maker of sealing-wax moulds. Give a local tinman a stick of the wax and tell him to make a mould for it—say for a dozen sticks at a time.

34/27. **Nemo Adolescens.**—The following are the last editions of the works which you mention:—Attfield's "Chemistry," eleventh edition (1885); Bentley's "Botany," fifth edition (1887); Ganot's "Physics," fifth edition (1884); Pereira's "Selecta à Præscriptis," seventeenth edition (1881); Wills's "Materia Medica," ninth edition (1886). We understand that a new edition of the last named is in preparation.

32/41. **Oyez** wishes to know the most effectual means for **Destroying Fleas** in a room in which clothes are kept. The clothes should be sent to a disinfecting establishment for exposure in the hot-air chamber for a time; the room should be fumigated with sulphur.

25/42. **A Sub.** submits the following question for our readers to answer:—"The largest number of mineral non-poisonous (B.P.) compatibles that will mix, and their names."

32/33. **J. C.**—(1) **Cucumber Juice** can be prepared by simple pressure of the sliced cucumber; to the juice add a fourth of its volume of rectified spirit; allow the feculence to subside, and filter. (2) You will find a number of formulæ for saponaceous tooth-powder in the DIARY, pages 264 and 265. Any one of them can be made into paste by the simple addition of sufficient of a mixture of water, 3 parts; and glycerine, 1 part.

33/1. **A. E. M.**—(1) A 1-per-cent. solution of osmic acid would **Stain the Skin and Hair** of horses black, but not permanently so, as the old cuticle and hair are being continuously renewed. The solution should be applied with a camel-hair pencil. (2) Ordinary soap-powder, such as Hudson's, may be used as **Sponge Powder**.



31/39. *C. B. G.*—For **Mounting Botanical Specimens** we know nothing better than **Tragacanth Paste**, which is used in some of the Government museums. The formula is as follows:—

Powdered tragacanth .. .. .	3vj.
" acacia .. .. .	3iv.
Glycerine .. .. .	3iij.
Water .. .. .	3vj.
Perchloride of mercury .. .. .	gr. xij.

Mix in a mortar, and add with dexterous stirring

Boiling water .. .. . 3vj.

When cold add 12 drops of oil of cloves.

31/57. *Alpha.*—(1) We do not know the composition of Spratt's Locurium. (2) Human blood is mammalian. The slight chemical difference between human blood and that of the lower animals (chiefly in the mineral constituents of the blood-cells) is not sufficiently great for analytical purposes. The differences in the shape of the red blood-corpuscles is the readiest means of distinguishing the origin of the blood.

33/58. *J. S. K.*—For **Caulking the Seams of a Canoe** we should think a resinous compound most suitable. Say a mixture of resin, 1 part; paraffin, 1 part; whiting, 1 part. Melt the first two, add the whiting, and bring to the proper consistence with lubricating mineral oil.

35/5. *Mint.*—The terms are synonymous.

35/8. *Leander.*—The addition of animal charcoal to liquor gutta-percha would have little influence in removing the colour, which is natural to the gutta-percha. Moreover, the decolourising property of the charcoal is only fully exerted in the presence of water.

35/13. *Davies.*—It is **Carbolic Colloid** you require. Make it with equal parts of collodion and carbolic acid (absolute).

34/70. *Ernst* says the marble polish given in last issue is not a success. We expect that he has used too much of it, and that liberal application of turpentine is now necessary. See our issue of September 1, 1888, page 273.

34/62. *F. G. W.*—We do not have a formula which we would care to print for rubbing oils which would "enresprains, strains, stiff joints, pains in the joints, contracted joints or muscles, rheumatics, rheumatism, lumbago, swellings, chilblains, sore throats, colds at the chest, wounds, cuts, sores, bruises, frost bites, burns, scalds, dog bites, &c." It is obvious that for muscular pains you would require to give a counter-irritant, and that would not do for wounds or chilblains.

35/6. *G. Jones.*—Barton & Castle's "British Flora Medica" is a book which would suit you. It costs about half a guinea.

34/55. *Bunion.*—You will find the application of a mixture of equal parts of glycerine and soap liniment good for the bunion. Soak a piece of lint with the mixture, apply to the spot and cover with oiled silk. Allow this to remain on all night, and continue for a week or two, scraping the bunion occasionally. A good application for day use is soap plaster spread on chamois, with the addition of a little belladonna plaster to ease the pain.

In reply to a query of *A Country Druggist* (24/35) we have communications from Messrs. Tyers & Thurlby, Leicester, who recommend a mixing machine made by Messrs. Bradley Brothers, Dixon's Green, Dudley; and from Mr. E. F. Goodall, Duffield, near Derby, who sends particulars of his own machines. "Country Druggist" is advised to apply to these makers.

## REPLIES TO QUERIES.

Mr. W. C. R. Groom, of Knysna, South Africa, is good enough to send answers to several queries which have appeared in this journal. With reference to the

### *Aqua Menthae*

discussion, Mr. Groom mentions that during forty years dispensing in the colony he has never had occasion to dispense aq. menthae sativæ, the use of pipcritæ being universal.

### *American Peach Bitters.*

I cannot find any formula for this in my American book, but the following would form a very agreeable bitter. Take:—

Peach kernels or bitter almonds .. ..	9 oz.
Angostura bark .. .. .	4 "
Pale brandy or proof spirits .. .. .	1 gallon.

Slice the peach kernels or almonds, &c., thinly, and digest 14 days. Strain and add:—

Sugar (white) .. .. .	2 lbs.
Water .. .. .	2 quarts.

Dissolved.

If peach-juice is procurable, two quarts may be added instead of the water; but if not, sufficient citric acid may be used, with a sufficiency of the artificial essence of peach.

### *Essence of Peach.*—(Professor Maisch).

Take:—

	Parts.
Formic ether .. .. .	5
Valerianic .. .. .	5
Butyric .. .. .	5
Acetic .. .. .	5
Glycerine .. .. .	5
*Oil of persico .. .. .	5
Aldehyd. .. .. .	2
Amylic alcohol .. .. .	2
Sebacic ether .. .. .	1

All by measure.

### *Bird Food.*

Take—

Pea meal .. .. .	1 lb.
Coarse sugar .. .. .	½ "
Fine grated bread (stale) .. .. .	½ "
Fresh butter .. .. .	2 oz.
Yolks of eggs .. .. .	2

Mix these well together and brown gently in a frying-pan. When cold mix well with

Poppy seeds .. .. .	2 oz.
Bruised hemp seed (separated from the husks) .. .. .	2 lbs.

### "Cape Gooseberry;" what is it?

This is the fruit of the physalis Peruviana or pubescens (Linn.), a solanacea growing throughout the colony of Cape of Good Hope, now quite naturalised. It is an annual or perennial herbaceous plant, growing to a very large size in moist situations, bearing great quantities of globose berries, two-celled, concealed in an inflated, nearly closed, five-angled calyx. The berries are pale yellow when ripe, and have a most delicious flavour when preserved, being preferred by Europeans to the preserve of the European gooseberry. Many tons are annually preserved by confectionery firms in Cape Town, Port Elizabeth, and Natal, and in the first-mentioned locality it has been cultivated for the sake of the fruit. It may occasionally be seen growing in greenhouses in England. Its wide distribution in this colony arises from the avidity with which birds eat it, afterwards voiding the rather hard seeds.

### *Transparent Transfers for Magic-lantern Slides; where obtainable?*

In this colony these are obtainable at all fancy stationers, and are called "transfer pictures," sold in sheets at a few pence each. The varieties are almost endless, most of them really beautiful figures, portraits, landscapes, &c. They are much used for ornamenting ostrich eggs, plaques, glass vases, bowls, &c. They are of German manufacture. They must surely be obtainable at fancy stationers in England.

\* This is oleum folii persico.



# "BUBBLES."

---

This artistic SHOWCARD, measuring  $21\frac{1}{2}$  in. by 30 in.,  
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SIR JOHN E. MILLAIS, B.T., R.A.

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LONDON, 1862.



[BRONZE.]

PARIS, 1867.



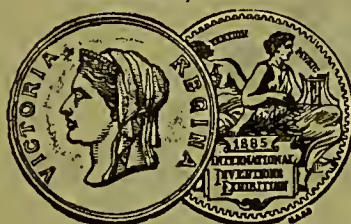
[SILVER.]

PHILADELPHIA, 1876.



[HIGHEST AWARD.]

LONDON, 1885.



[GOLD.]

PARIS, 1885.



[GOLD.]

LIVERPOOL 1886.



[GOLD.]

ADELAIDE, 1887.



[HIGHEST AWARD.]

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SODA ASH - -	

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# PURE CHEMICALS

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ACID, GALLIC ... ..	Almost white needles ... ..	Freely and entirely soluble in alcohol or water
„ PYROGALLIC ... ..	Bi-sublimed, white, bulky ... ..	Ditto ditto ditto.
„ SALICYLIC (Kolbe's)	White, powder, crystallised and dialysed	Dissolves colourless in water or alcohol; purest for medicine.
„ TANNIC ... ..	Lightest crystals ... ..	Dissolves almost colourless in water, alcohol, and ether.
„ „ ... ..	Powder and granulated ... ..	Dissolves freely in water, alcohol, and ether.
CELLOIDINE (Patent) ... ..	Gelatine plates... ..	Purest Pyroxylin; inexplusive.
CHLORAL HYDRATE ... ..	White cake and crystal ... ..	See Liebreich's, below.
CHLORAL HYDRATE (Liebreich's)	Transparent rhomboidals (facsimile of Dr. Liebreich's)	Will not decompose by age.
CROTON CHLORAL... ..	Shiny crystalline scales. (Powder form most objectionable)	Free from foreign chlorides.
GLYCERINE... ..	S.G. 1260, double distilled, brilliantly white, odourless; also lower S.G. and qualities	Free from lime, chlorides, metals; will stand severest chemical tests.
IODINE ... ..	Resublimed, fine scales ... ..	Purest.
IODOFORM, Absolut. ... ..	Crystals and powder of soft touch...	Purest; made by electrolysis.
PARALDEHYD ... ..	... ..	Absolutely purest.
POTASS. BROMIDE ... ..	Fine white dry regular crystals ...	Perfectly free from iodide, and the most free from chloride.
„ PERMANGANATE	Large and small crystals ... ..	Chemically pure.
„ IODINE ... ..	Fine white dry regular crystals ...	Apply Barytic and other tests. This will never change colour.
SODA SALICYLATE, and other Salicylates	White powder and crystals ... ..	Freely soluble in water and alcohol.

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ERGOTINE, pure Dialysed ...	Brown colloid, purified by Dialysis	Free from all saline matter present in the ordinary Ergotine and extracts.
FERRUM OXYD. (5% Dialysed)	Transparent brown liquid, purified by Dialysis	Free from all saline matter. Diluted by ten times its weight of water, will stand the test of Nitrate of Silver.
PEPSIN PORCI (100%) ... ..	White, sweet, odourless powder ...	Freely soluble in water, not hygroscopic, and will not deteriorate; will dissolve (by Wittstein's test) 100 parts of white of egg and 250 parts of fibrine.

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**PATENT JODOL AND ANTIFEBRINE.**

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N.B.—We guarantee our Chloroform prepared from METHYLATED SPIRIT to be PURE CHLOROFORM, answering all the tests of the British Pharmacopæia.

## CASCARA SAGRADA CAPSULES,

In Boxes, at 1/6 and 2/6. 14/- and 24/- per dozen.

Each Capsule equal to half a teaspoonful of Fluid Extract of Cascara Sagrada. The chief drawback to the use of this valuable drug, its unpleasant bitterness, is obviated when taken enclosed in Capsules.



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**PEROXIDE of HYDROGEN**, for Bleaching Feathers, Hair, Silk, Jute, Ivory, Bone, &c.  
**CRETA PRÆCIP.** Very White, Soft, and Light.  
**PHOSPHORIC ACID, B.P.** strength and concentrated, Pure and Free from Arsenic.  
**LIQ. FERRI PERCHLOR. FORT., B.P.** Free from Arsenic, and Soluble in Spirit.  
**HYPOPHOSPHITES of LIME, SODA, &c. CYANIDE of POTASSIUM.**

Ferri et Ammon. Cit., Ferri et Quiniæ Cit., B.P., and other Scale Preparations.

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1 part to 5 Sp. Vinyl Rect. 56 o.p. makes Sp. Æth. Nit. 850.

This concentrated preparation is carefully drawn in our own laboratory, is highly recommended, and is daily finding increased favour with the trade for making Sp. Nitre, as required for use, and thus avoiding the risk of a development of free acid, which is more or less prevalent in Sp. Nitre that has been drawn some time. Price in Winchester Quarts, 8s. per lb., net.

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# HEWLETT'S MIST. PEPSINÆ CO. C. BISMUTHO.

Highly recommended in various forms of dyspepsia, having a direct action upon the mucous membrane of the stomach and intestines as a sedative. It can be administered with marked and almost instantaneous effect in the irritative form of dyspepsia more especially when *pyrosis* is a conspicuous symptom, and pain occurs an hour or more after food. In simple neuralgic gastric pain following eating, occurring in feeble subjects, it is especially indicated, and even in *carcinoma* it has been used with great success in alleviating pain and vomiting.

In the dyspepsia of patients dependent upon some organic disease, and where there is a decided loss of nerve power, it is of singular service. Thus, for instance, a person after a meal complains of a peculiar gnawing and emptiness, with slight pain at the epigastrium, evident signs of general relaxation and loss of nerve power, clinical experience has shown that it is of great service as a tonic and stomachic. A portion of its value arises, it may be, from its action upon the spinal motor nerve centres. Be these things as they may, experience has abundantly demonstrated the value of the compound as a stomachic, anti-dyspeptic, and tonic, in general functional atony and relaxation, and in the various forms of dyspepsia, constipation, or diarrhoea, connected with atony of the visceral muscular coat, the Mist. Pepsinæ Co. c. Bismutho is a very valuable remedy. In the *exhausting purging of Phthisis*, accompanied with night sweats and restlessness, Dr. MATHEWS, of Nantwich, has used it with marked and appreciable effect.

Price (in England) 10s. 6d. per pound.

Physicians will oblige, when ordering Mist. Pepsinæ Co. c. Bismutho, by writing Mist. Pepsinæ Co. (Hewlett's).

Packed (for Dispensing only) in 10-oz., 22-oz., 40-oz., and 90-oz. Bottles.

## LONDON MEDICAL RECORD REPORT.

MISTURA PEPSINÆ COMPOSITA CUM BISMUTHO.

"This combination of Messrs. HEWLETT is one which has been extensively tested, and with good results. It is justly popular in the profession as a very valuable and effective combination. It serves not only to improve aepsia, but to lessen the gastric pain and to facilitate difficult and painful digestion, without setting up any evils of its own. It is a very good crutch for persons of weak stomach to lean on."—January 15th, 1881.

## C. J. HEWLETT & SON,

MANUFACTURING CHEMISTS,

40, 41 & 42 CHARLOTTE STREET, LONDON, E.C. [Established 1832.]

## BANNER'S LIVERPOOL SUMMER SEASON SPECIALITIES.

### GRANULAR EFFERVESCENT CITRATE OF MAGNESIA. DALMATIAN INSECT POWDER (FROM CLOSED FLOWERS).

1-cwt. Case of Tins Mag. Cit. Gran. Effer. at 6½d. per lb. | 28-lb. Tins Mag. Cit. Gran. Effer. at 7d. per lb.

## GREAT REDUCTION!

### NEW AMERICAN OIL OF PEPPER-

MINT, NOT deprived of its Menthol, 8s. 9d. per lb.

An original 22-oz. bottle free by parcel post for 12s. 6d.

8-oz. Capsuled E. I. Mustard Seed Oil, branded "Star of India" on Capsule, bottle ... .. 8/9 per doz.

4-oz. Capsuled ditto, ditto ... .. 5/6 " "

28-lb. tins Dalmatian Insect Powder ... 1/2 per lb.

56-lb. tins Chilian Honey ... .. -/3 " "

10-lb. tins Super Ess. Lemon ... .. 5/6 " "

7-lb. pottle P. Rhei E. I. Elect ... .. 3/- " "

56-lb. Bale Senna T.V. ... .. -/3½ " "

4½-gallon tins finest non-freezing Norwegian Cod Liver Oil ... .. 4/6 per gal.

### CIRCISSIAN SWEET OIL. — 40-gallon

barrel, bright and clear as COLZA OIL—1s. 6d. per gallon (for Hair Oil, &c.); sample 9-gallon tin for 15s.

40-lb. tin Baseline Petro. Jelly (firmer than Vaseline) ... .. -/4 per lb.

(Best Ointment and Pomade basis.)

Dozen Pure Menthol Cones, in neat turned wood boxes ... .. 2/- per doz.

One-Gross case 3d. size "Struck down Dead" Vermin Killer, with "Poison Register," for 10/6.

GOOD MERCHANTABLE QUALITY GUARANTEED.

E. R. BANNER, DRUG MERCHANT, 56 BOALER STREET, LIVERPOOL.



ESTABLISHED OVER 140 YEARS.

# **BURGOYNE, BURBIDGES, CYRIAX & FARRIES, WHOLESALE & EXPORT DRUGGISTS,**

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PHARMACEUTICAL PREPARATIONS,**

AND MAKERS OF

**Technical and Scientific Chemicals,  
Alkaloids, &c.,**

**IMPORTERS & DISTILLERS OF ESSENTIAL OILS,**

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Apparatus, Surgical Instruments, Patent  
Medicines, &c., &c.**

New remedies stocked immediately upon introduction. Preparations prepared according to the formulæ of all the known Pharmacopœias. Correspondence and Lists in all foreign languages.

**SAMPLES AND SPECIAL QUOTATIONS UPON APPLICATION.**

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AGENTS.  
“SULFONAL-RIEDEL”  
Which has been awarded a GOLD MEDAL at the Brussels Exhibition.  
THE NEW HYPNOTIC.  
SULFONAL-RIEDEL TABLETS.  
PEPSIN-RIEDEL P.B. & P.G.  
METHYLENCHLORIDE, Pure, spec. grav. 1,351.  
Manufacturer: J. D. RIEDEL, BERLIN.  
TO BE OBTAINED THROUGH WHOLESALE DRUGGISTS.

ACETIC ACID,  
Chem. Pure, 30, 33 (P.B.), and up to 95 per cent., and  
GLACIAL.  
Manufactured by the LARGEST MAKERS  
VEREIN FUR CHEMISCHE INDUSTRIE  
(Union of Chemical Industries).  
Head Office—FRANKFORT-ON-MAIN. 9 Factories.

IRON REDUCED BY HYDROGEN  
IN EVERY PERCENTAGE.  
The Speciality of the “CHEMISCHE FABRIK”  
OF  
Dr. PAUL LOHMANN,  
HAMELN, HANOVER.  
GLYCERINE, CHEM. PURE,  
d. d. 1,260 S. G.  
CARBONATE OF MAGNESIA AND  
CALCINED MAGNESIA. Lightest and Purest.

IODOFORMIUM BITUMINATUM  
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FOREIGN SPECIALITIES & MEDICINES.

REVISED PRICE LIST.

ROBERTS & CO.

FOREIGN AND ENGLISH CHEMISTS,

WHOLESALE, IMPORT, AND EXPORT AGENTS FOR

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Messrs. Roberts & Co. beg to inform the Trade that they are Agents for all the principal French and Foreign Specialities and Medicines, a large supped of which they have always on hand, and can supply on very favourable terms. They are in daily communication with their Paris House, and can offer exceptional facilities for procuring New Medicines, &c., &c., with very little delay. The following is a list of a few that they name *au hazard*, any that have a large sale :—

Retail	Per doz.	Retail	Per doz.	Retail	Per doz.	Retail	Per doz.
4/6..Aleool de Menthe Riecles	41/5	4/6..Capsules Matieo	36/	2/3..Guyot's Goudron	18/	7/0..Rabuteau's Elixir Ferrug.	65/
2/9 Ditto ditto	21/8	4/6.. " Raquin	36/	11/..Laville's Gout Tincture	91/10	2/9.. " Sirop	24/4
2/9..Aubergier's Syrup	26/3	4/6.. " Mathey Caylus	27/	11/.. " Pills	91/10	4/0..Racahout	31/
2/9.. " Pâté	15/4	4/6..Ohassaing's Wine	38/9	2/3..Papier Fayard	13/6	4/6..Reynal's Bougies	37/10
6/6..Bay Rum	57/	2/9.. " Pills	24/4	1/1.. Ditto	7/3	2/9..Ricord's Injection	24/4
5/6.. Ditto	31/	4/6..Olin's Bromide Oam. Dragées	45/	4/..Papier Fruneau	24/4	4/6.. " Capsules	36/
2/..Belloc's Charcoal	15/4	5/..Eau Botot (Genuine)	40/1	2/3.. Ditto	14/5	9/.. " Syrup	90/; 4/6; 42/
1/9.. " Lozenges	14/5	3/.. Ditto	24/4	1/9..Pâté Aubergier	15/4	1/6..Star Paper	11/
4/6..Blaneard's Pills	32/5	2/6..Espic's Cigarettes	13/6	1/9.. " de Berthé	15/4	2/9..Vallot's Pills	22/6
2/6.. Ditto	18/	6/..Elixir de Cooca	56/9	2/9.. " de Ooca	24/4	1/9.. Ditto	14/5
8/..Brou's Injection	27/	2/9..Flon's Syrup	22/6	1/9.. " de Georgé	14/5	4/6..Veloutine (White,Pnk,Yel.)	37/1
8/ Bugeaud's Wine	36/	2/..Gayetty's Paper	15/4	1/1.. Ditto	9/	3/6.. Ditto ditto	27/
4/ Bully's Vinegar	32/5	2/3..Granules Arsen. Acid	13/6	1/6.. " de Nafé	13/6	2/9..Vichot's Trochisques	21/8
2/.. Ditto	16/3	2/9.. " Iron	14/5	1/9.. " Regnauld	14/5	4/6..Valentine's Meat Juice	38/
4/6..Candé's (Lait Antéphilq.)	39/8	2/9.. " Soda	15/4	7/..Pierlot's Valerian	59/5	4/6..Vin de Cooca Mariani	39/8
4/6..Capsules Bromide Camph.	45/	2/9..Grimault's Syrup Lime	23/5	2/9..Rabuteau's Drgées Ferrug	24/4		

Special Quotations in large quantities.

MM. Roberts & Cie. ont l'honneur d'informer MM. les Pharmaciens Spécialistes de France et de l'Etranger qu'ils se mettent à leur disposition pour des dépôts qu'ils voudraient établir à Londres. On peut avoir tous renseignements en s'adressant à leur maison de Londres ou à Paris.

SPECIAL AGENTS FOR MARIANI'S ELIXIR, EXTRACT PATE, PILLS, SYRUP AND WINE OF OCOA, AND FOR VALENTINE'S MEAT JUICE AND LE GRAND'S ORIZA PERFUMERY.

Established] House in Paris: ROBERTS & CO., Rue de la Paix 5. [1823.



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## MANUFACTURING CHEMISTS

AND

## DRUG GRINDERS.

WAREHOUSES, LABORATORIES, AND DRUG MILLS,  
**COVENTRY.**

### WYLEYS' PEARL-COATED PILLS.

All mixing, cutting, rounding, picking, &c., is accomplished with the aid of steam machinery, by which means we attain a uniformity in composition and size such as cannot be equalled by hand-work.

For finish, and general good appearance, they will compare most favourably with any in the market.

### WYLEYS' GELATINE-COATED OVAL PILLS.

The only oval gelatine-coated pills of English manufacture in the market.

Our "Prices Current" contains an extensive list of coated pills, showing formulæ and prices, together with a number of TESTIMONIALS. Estimates for private formulæ supplied.

### MALTED FOOD

#### FOR INFANTS & INVALIDS.

PRICES.—In Bulk, 42/- per cwt.; Half-pound Packages, 4/- per doz.; One Pound Packages, 7/6 (subject to Patent Medicine Discount).

### GLYCERINE SUPPOSITORIES

(WYLEYS).

FOR USE IN CONSTIPATION.

AS FIRST INTRODUCED BY OURSELVES.

*The Lancet* says our Suppositories are "most useful and convenient additions to the Materia Medica."

*The British Medical Journal*.—"They constitute a very convenient and portable form by which glycerine can be administered into the rectum."

Ordinary (Pessary size) ..... 1s. 6d. dozen.  
Small, for Children ..... 9d. "

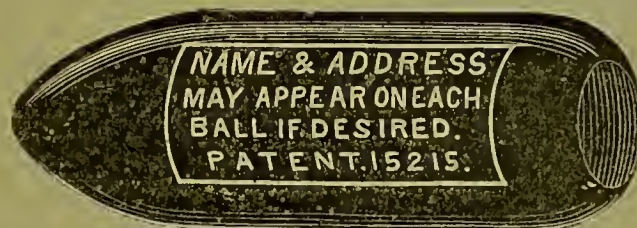
### HAMAMELIS AND GLYCERINE SUPPOSITORIES

#### FOR HÆMORRHOIDS.

Supplied in Slide Boxes, each containing one dozen Suppositories, 1s. per box.

### THE DURAPLASTIC COATED HORSE BALL.

(PATENTED.)



"The obvious superiority of these balls over the old paper-wrapped articles will impress the most stolidly conservative of farmers."—*The Chemist and Druggist*, October 27, 1888.

No. 4.—Alterative Balls	...	...	24/	per gross.
" 5.—Astringent Balls	...	...	24/	"
" 12.—Condition Balls	...	...	24/	"
" 6.—Cordial Balls	...	...	24/	"
" 7.—Cough Balls	...	...	24/	"
" 16.—Cough Balls	...	...	27/	"
" 17.—Cough Balls	...	...	27/	"
" 8.—Diuretic Balls	...	...	24/	"
" 9.—Fever Balls	...	...	24/	"
" 1.—Physic Balls	...	...	24/	"
" 2.—Physic Balls	...	...	30/	"
" 3.—Physic Balls	...	...	36/	"
" 18.—Physic Balls	...	...	42/	"
" 19.—Physic Balls	...	...	48/	"
" 15.—Stimulating Balls	...	...	24/	"
" 10.—Tonic Balls	...	...	24/	"
" 11.—Tonic Balls	...	...	20/	"
" 13.—Worm Balls	...	...	30/	"
" 14.—Worm Balls	...	...	60/	"

#### PRIVATE FORMULÆ.

WYLEYS & Co. will be glad to prepare Patent Duraplastic Balls from private recipes.



# “CUTTING COUNTERACTED.”

## MOONSEED BITTERS brings FULL PRICES.

### WHY?

Because every one who retails Moonseed Bitters has to sign an Agreement or Contract in the following terms:—



### MOONSEED BITTERS.

Above is Facsimile of  
THE WRAPPER LABEL  
of the 2/9 size.  
It is also sold at 4/6.

### MOONSEED OINTMENT.

Retails at 1/1½, 2/9, 4/6 per box.

Memorandum of Agreement made this.....day of..... 1889, between A. E. POWELL & COMPANY, of Swindon in the County of Wilts, Proprietors of the Moonseed Bitters and Moonseed Ointment (hereinafter called the “Vendors”), of the one part and ..... of ..... (hereinafter called “the Purchasers”), of the other part.

Whereby it is mutually agreed between the said parties hereto as follows:—

In consideration of the Vendors selling to and supplying the Purchasers with Moonseed Bitters, Moonseed Ointment, and other preparations manufactured and sold by them (hereinafter termed “the Goods”) at their usual prices, the Purchasers will observe and perform the following terms and conditions:—

1. The Purchasers to sell the Goods retail for full printed prices only, and for each and every Bottle or Box of Moonseed Bitters, Ointment, or Pills sold by him or them at any less price, without the written consent of the Vendors, the Purchasers shall pay to the Vendors the Sum of Twenty Shillings in the nature of a penalty, to be recoverable as ascertained liquidated damages.

2. The Purchasers not to supply any Wholesale House nor to sell the Goods wholesale, to any Chemist or Druggist or Medicine Vendor who will not previously enter into an Agreement to retail the same at prices in accordance with the preceding Clause No. 1 of these presents.

All Purchasers who have signed a similar form of Agreement to the foregoing will be supplied upon the Vendors’ usual trade terms, but those Purchasers who do not sign a similar form of Agreement to be supplied upon the following terms only, namely:—RETAIL, 4s. 5d. for each and every 4s. 6d. Box or Bottle, 2s. 8d. for each and every 2s. 9d. Box or Bottle, and 1s. 0½d. for each and every 1s. 1½d. Box or Bottle—net in all cases. WHOLESALE, 4s. 4d. for each and every 4s. 6d. Box and Bottle, 2s. 7d. for each and every 2s. 9d. Box or Bottle, and 11½d. for each and every 1s. 1½d. Box or Bottle—net in all cases. This Agreement and the terms and conditions herein contained to remain in full force and virtue for the term of 7 years from the first day of March, 1889.

As witness the hands of the said parties hereto the day and year first above written.

We call attention to the important steps which we have taken to prevent our specialities being retailed at less than the advertised prices, and we ask the co-operation of the Trade in maintaining the integrity of the scheme whereby the sale of our preparations may always be retained by the legitimate trade. We will not only endeavour, by all means in our power, to prevent the advertised prices being “Cut,” but will give Chemists every assistance and facility for making this a large as well as a paying business.

Please write for Terms and Form of Agreement. NOTE that we allow retailers of Moonseed Bitters 2s. 6d. per thousand for the Distribution of Pamphlets.

## A. E. POWELL & CO., SWINDON.



# IMPORTANT NOTICE

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**P**LEASE OBSERVE that, as the leading Wholesale Houses have now signed our contract, we no longer pay carriage through Messrs. Edwards & Son or any other house. Our goods being obtainable through these sources we can no longer fill retail orders, and we have to ask respectfully that such orders be entrusted to the Wholesale Houses.

Further, in the course of this week all the Houses who hold stock will receive supplies of our certificate, which is to be sent to the Wholesale Dealer when ordering. Chemists will please make a note of this, and apply to us for the form of agreement, as, if the terms of the certificate are not complied with, the goods are charged on the higher scale—that is to say, the prices charged to "cutters," viz., 4/5, 2/8, and 1/0½ per box or bottle.

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We respectfully call the attention of the Drug Trade to the Terms of the Agreement as given on the opposite page, and ask their support in maintaining prices and in extending the profitable sale of the article.

---

**A. E. POWELL & CO.**  
**SWINDON.**



**TO CASH BUYING CHEMISTS.****FIRST COME FIRST SERVED.**

**SURPLUS STOCK. SPECIAL OFFERS FOR CASH WITH ORDER ONLY. SUBJECT TO BEING UNSOLD.**  
 Orders executed in the rotation received. Cash will be returned where goods are sold out.

1/6 Albion M. & S. Soap .. .. per doz. 10/3	— Zonweiss .. .. per doz. 7/	1/6 King's Oatmeal .. .. per doz. 4/2
1/1 1/2 Warner's Safe Pills .. .. 8/8	2/ Gibson's Furniture Cream .. .. 12/	1/6 Bond's Ink with Stretcher .. .. 2/8
1/6 " Safe Yeast .. .. 3/6	1/6 Cleaver's Terebene Soap .. .. 10/	1/ " " " " " " " " 5/4
1/6 Diamond Dyes .. .. 3/2	1/1 1/2 Woodward's Gripe Water .. .. 8/6	1/6 Spratts Dog Soap .. .. 3/3
1/6 Lincham's Hair Regenerator .. .. 9/6	1/1 1/2 Kompo .. .. 8/6	1/1 1/2 Soden Mineral Pastilles .. .. 9/9
4/6 Barclay's Bouillon .. .. 33/	1/6 Boxes Wright's Coal Tar Soap .. .. 10/	4/6 Swift's Specific, 38/6; Dry, 18/6.
1/6 Boxes W. & G.'s Old B. W. Soap .. .. 9/6	2/ Atkinson's Perfumes .. .. 14/	Dutch Drops, stamped, per doz. 3/3; per gross, 35/.
4/6 Vin Mariani .. .. 33/3	3/6 " " " " " " " " 24/6	2/6 Lamplough's Saline, 22/6; 4/6, per doz., 41/.
1/ Tetlow's Gossamer Toilet Powder .. .. 7/3	1/6 King's Food .. .. 4/2	2/9 Red Cross Pills .. .. per doz., 23/
1/1 1/2 Hall's Lung Restorer .. .. 8/7	1/ " " " " " " " " 7/4	1/1 1/2 Reade's Essence Sulphur and Reade's Chest
2/9 " " " " " " " " 22/6	2/6 " " " " " " " " 17/6	Ealsam (both slightly soiled), per doz., 6/.

Camphor, English Refined, in 1/2 ounce blocks, per lb., 1/6.  
 Soy, E. I., per ga., 2/. Cerasin Yellow, per lb., 6/; per cwt., 50/.  
 Bicarbonate Soda, Brunner, Mond's, 14 lbs. for /11, per cwt., 6/6.  
 Powdered Rhubarb, per 2-lb. bottle, 6/6, bottle included.  
 Permanganate of Potash Crystals, per lb., 9/1.  
 Bicarbonate Potash Crystals, per lb., 4/.  
 Powdered Cassia, Best, per lb., 5/; 14 lbs. for 5/6.  
 Loofahs, Compressed, per doz., 1/.  
 Castor Oil, E. I., per lb., 3/; per 40-lb. tin, 9/.

**ALL FREE ON RAILS LEEDS.****W. B. MASON, Wholesale Druggist, LEEDS.**

London Office—CASTLE COURT, 26 HIGH HOLBORN.

All Orders to be sent to Leeds.

**DRUGS, CHEMICALS, AND PHARMACEUTICAL PREPARATIONS****BARRON, SQUIRE & CO.**

(LATE DREW, BARRON, &amp; CO.),

**WHOLESALE & EXPORT DRUGGISTS,  
BUSH LANE, LONDON, E.C.,****MANUFACTURERS OF ALL DESCRIPTIONS OF PHARMACEUTICAL PREPARATIONS,**

**Beg to inform Merchants, Shippers, &c., that all Indents entrusted to them will receive careful attention and prompt execution.**

Messrs. B., S. & Co. request the attention of their friends and the Trade, at home and abroad, to their having **PURCHASED THE BUSINESS** of Messrs. JAMES BASS & SONS, Hatton Garden, and with it the various Formulæ from which their Special Preparations have been made, and pledge themselves to supply them in all their integrity.

*Specimens of these Preparations have remained in the Museum of Kew Gardens during 23 years without deterioration.*

**WILLOWS, FRANCIS & BUTLER**

(Late BURGESS, WILLOWS &amp; FRANCIS),

**Wholesale and Export Druggists,**

WHITE HORSE BUILDINGS,

**101 HIGH HOLBORN, LONDON.****ESTABLISHED 1751.****DRUGS, CHEMICALS, AND PHARMACEUTICAL PREPARATIONS.****PRICE LISTS ON APPLICATION.**



# Dr. J. COLLIS BROWNE'S CHLORODYNE.

THE ORIGINAL AND ONLY GENUINE.

## IMPORTANT CAUTIONS

From Lord Chancellor SELBORNE, Vice-Chancellor Sir W. PAGE WOOD,  
and the LORDS JUSTICES OF APPEAL.

VICE-CHANCELLOR SIR W. PAGE WOOD, by whom the suit in Chancery was first heard, stated in his judgment that 'Dr. J. Collis Browne was undoubtedly the Inventor of Chlorodyne, that the whole story of the Defendant Freeman was as deliberately untrue as the falsehood he had deposed to with reference to the use of his Chlorodyne in the Hospital.'

The VICE-CHANCELLOR also stated, 'that Chlorodyne was a fanciful name, and had application been made sooner, the Court would have given Dr. Browne protection.'

LORD CHANCELLOR SELBORNE coincided with the judgment of the Vice-Chancellor upon this point, and stated 'that had application been made at a proper time and place, the Court would have found means to restrain the Defendant from misrepresenting the decision of the Vice-Chancellor.'

LORD JUSTICE JAMES, on appeal, stated in his judgment, 'that the Defendant Freeman had made a deliberate misrepresentation of the decision of Vice-Chancellor Wood.'

It was proved in Court, on affidavit by Mrs. Forbes, of Paris, that the testimonial published in the *Times*, November 14th, 1865, speaking of the great efficacy of Chlorodyne in Cholera, referred to Dr. J. Collis Browne's Chlorodyne, and that she never used any other, that she had written to the Defendant Freeman to that effect; notwithstanding which notice the Defendant publishes the said testimonial as referring to his medicine.

The Editor of the *Medical Times*, in his report on Chlorodyne, January 13th, 1866, gives information that the Chlorodyne referred to was the medicine introduced by a retired Army Medical Officer, which was Dr. J. Collis Browne; still this is published by the Defendant as testimony to his medicine.

Numerous affidavits from eminent Physicians and others were produced in Court, stating that Dr. J. Collis Browne was the inventor of Chlorodyne, and that when prescribing they mean no other.

The Defendant himself publishes that his compound is in effect and composition quite different to any other preparation; nevertheless he assumes the name, testimonials, &c., of Chlorodyne.

Technicalities in law prevent that protection which the public should justly have against such a course of conduct. It is now incumbent on all who purchase Chlorodyne to see that the name, 'Dr. J. Collis Browne's Chlorodyne,' is engraved on the Government Stamp, as it is not sold otherwise. All other compounds under the name of Chlorodyne are spurious. All attempts at analysis have failed; hence the statement that the constituents of Chlorodyne are known is a misrepresentation.

ORIGINAL AND



ONLY GENUINE.

## FURTHER IMPORTANT NOTICE.

The subjoined list of eminent Firms concur with Vice-Chancellor Sir W. Page Wood's statement in Court, that Dr. Collis Browne was undoubtedly the Inventor of Chlorodyne; and that when Chlorodyne, or the Original Chlorodyne, is ordered, they invariably supply Dr. J. Collis Browne's:—

Apothecaries' Hall,	London	Frazer & Green,	Glasgow	Morson, T., & Son,	London
Allen, Hanbury & Co.,	"	Gale & Co.,	London	Newbery & Sons,	London
Baiss Brothers,	"	Giles & Son,	Clifton	Oldham, G., & Co.,	Dublin
Banks & Richards,	Birmingham	Goulding, Messrs.	Cork	Parsons & Richardson	Leicester
Barron, Harvey & Co.,	London	Gratton & Co.,	Belfast	Peake, Allen & Co.,	Dublin
Bell, John, & Co.,	"	Grimwade, Ridley,	London	Raines & Co.,	York
Bourne & Taylor,	"	Grindley & Son,	Chester	Raines & Co.,	Edinburgh
Corbyn & Co.,	"	Hearon, Squire & Francis,	London	Sang & Barker,	"
Cox & Gould,	"	Hodgkinson, Tonge & Stead,	"	Sanger, J., & Sons,	London
Curling & Co.,	"	Hopkins & Williams,	"	Sim, James, & Co.,	Aberdeen
Curtis & Co.,	"	Hovenden, R., & Sons,	"	Smeeton, W.,	Leeds
Davy, M'Murdo & Co.,	"	Hunt & Co.,	Exeter	Southall & Co.,	Birmingham
Dobbin, W., & Co., Limited	Belfast	Hunt, A., & Co.,	"	Sutton, W., & Co.,	London
Drew, Barron & Co.,	London	Johnson, J. H. & S.,	Liverpool	Tomlinson, Hayward & Co.,	Lincoln
Drew, B., & Alexander,	"	Langton, W., & Co.,	London	Treacher, Hodgkinson & Co.,	London
Dunn & Company,	"	Lynch & Co.,	"	Westrup, J. B.,	Kensington
Edwards, W.,	"	Mander, Weaver,	Wolverhampton	Westwood & Hopkins,	London
Evans, Gadd & Co.,	Exeter	Marsden & Sons,	London	Woolley, James,	Manchester
Evans, Leacher & Webb,	London	Maw & Son,	"	Wyleys & Brown,	Coventry
Ferris & Co.,	Bristol	Meggesson & Co.,	"	Yates & Co.,	London
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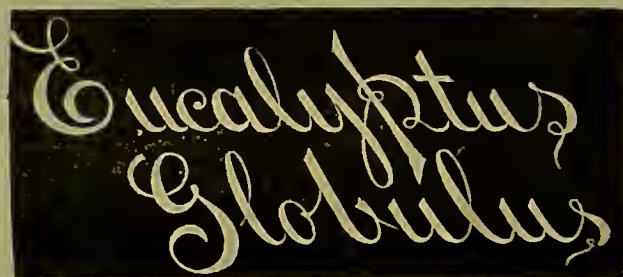
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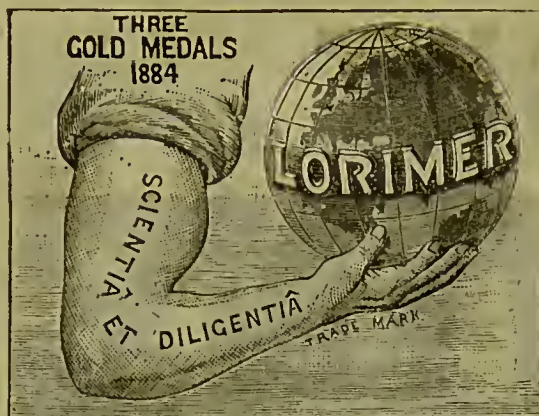
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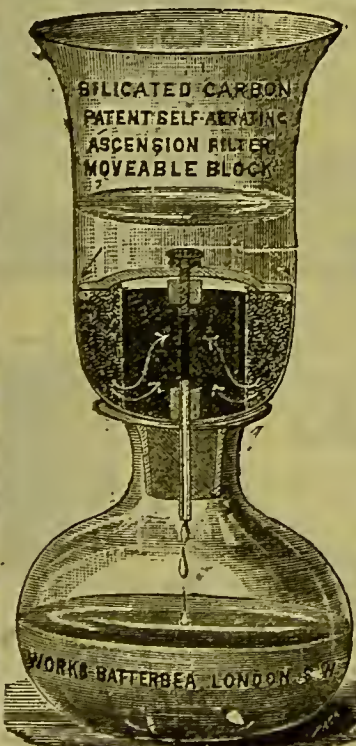
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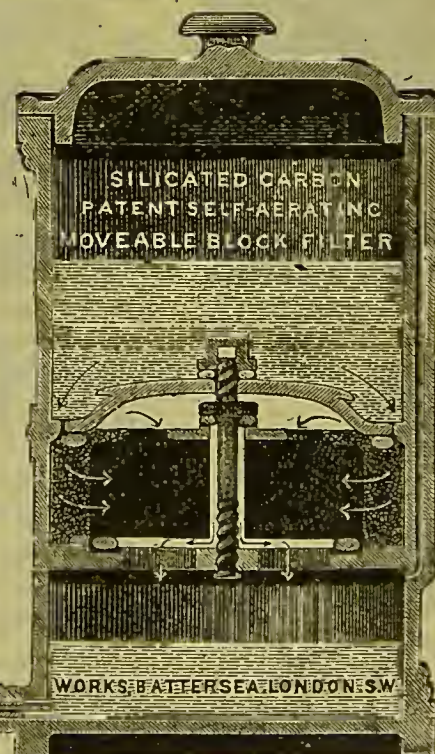
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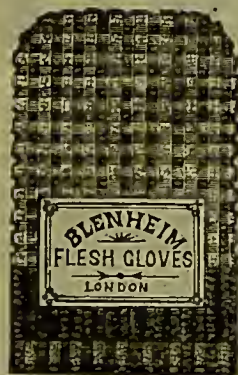
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# OAKLEY'S NON-MERCURIAL SILVERSMITH'S SOAP,

For Cleaning and Polishing Silver, Plate Glass, Marble, &c. Tablets, 6d. each.

# OAKLEY'S "POLYBRILLIANT" (Registered).

A Magic Pomade for Cleaning Brass, Copper, Tin, Pewter, Britannia Metal, &c. Never becomes dry and hard like other Metal Pastes.

Tins 1d., 2d., 3d., and 6d. each.

# WELLINGTON BLOCK BLACK LEAD,

In 1d., 2d., and 4d. Blocks, and 1s. Boxes.

**WELLINGTON EMERY & BLACK LEAD MILLS, Westminster Bridge Road, London, S.E.**

Highest award and Prize Medal, Philadelphia Exhibition, 1876; and Boston, 1888. Gold Medal, Crystal Palace, 1884



OSCAR SUTTON &amp; CO., Preston, Lancashire, England.

## O.S. TOOTH BLOCK.

REGISTERED



TRADE MARK.

Be particular to observe that the Registered Trade Mark and the name "OSCAR SUTTON & CO." are stamped on all that are genuine, as worthless imitations are in the market.

## BEST &amp; SAFEST DENTIFRICE

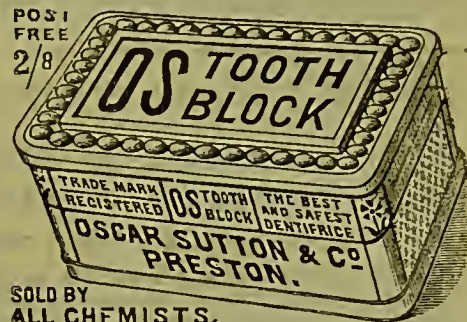
SOLD BY ALL CHEMISTS  
AND PERFUMERS, IN  
ELEGANT CRYSTAL  
TOILET CASKET  
PRICE 2/6.

ALSO IN PATENT  
METALLIC BOX  
PRICE 1/-



Prepared from materials recommended by several of the most eminent Dentists of the day, at a Meeting of the Odontological Society, held in London, February 1875, when the important subject of Dentifrices was discussed.

POST  
FREE  
2/8



SOLD BY  
ALL CHEMISTS.

## THE BEST AND SAFEST DENTIFRICE.

TWO THOUSAND TESTIMONIALS.

## FANCY NOVELTIES.

Chemists in ordering the above are recommended not to forget

## TETLOW'S

## AMERICAN FACE POWDERS,

Which are now selling more than ever.

6d. "SWANDOWN." 6d. 1/- "GOSSAMER." 1/-  
3/9 per doz. 7/8 per doz.

A Sample Bottle of perfume given with  
each box of Swandown.

A Metal Puff Box given with each box  
of Gossamer.

Chemists will find these articles most attractive for the Counter; they sell readily wherever shown. Quality is proved by constant and increasing sale. Supply of free samples with each order of 1 doz.

Order through your Wholesale House, or direct from London Depot—

HENRY C. QUELCH, 19 Ludgate Hill, LONDON, E.C.

## EWEN'S LARD

IS

## GUARANTEED PURE.

EVERY GENUINE PACKAGE BEARS THEIR LABEL.

Trade Mark.

Trade Mark.

## EWEN'S

Clarified Fat Works,

Perfumery and

Toilet Soap Factory,

5 HATFIELD STREET, LONDON, S.E.



Facsimile of Label.



Facsimile of Label.

A Lovely Bath and Toilet Water obtained by Using



## PASTA MACK.

GOLD MEDAL, Hygienic  
Exhibition, Ostend, 1888.

This entirely New and Un-  
rivalled Health-giving Pre-  
paration Softens the  
Water, instantly imparts a  
Most Delicious Odour, and  
Beautifies the Com-  
plexion in an extraor-  
dinary way.

Of all respectable Perfumers  
and Chemists, Beware of  
Worthless Imitations. See  
the Trade Mark on every  
box.

The Queen says:—"Pasta Mack is made in small tablets, which are pleasantly scented, and when placed in water soon dissolve, and impart a violet-like perfume to the water and the atmosphere."

Weldon's Journal says:—"It is wonderfully refreshing for the bath or for bathing the face after exertion or fatigue. In this charming preparation is offered the most unique and agreeable means of perfuming and softening water for our daily use."

Sole Manufacturer and Inventor, H. MACK, Ulm a/D. Export from all whole-  
sale houses. Wholesale Agents for Great Britain, OSBORNE GARRETT & CO.,  
London, W.

## PURE OTTO OF ROSE,

SPECIALITY OF

## SHIPKOFF &amp; CO.

DISTILLERS AND EXPORTERS,

## KIZANLIK, BULGARIA.

Agent for Great Britain—G. P. BAKER, 19 Ivy Lane,  
LONDON, E.C.

THE OTTO OF ROSE which this house distils and exports is known above all by the absolute purity of its quality and the unexcelled sweetness and strength of its odour. It is guaranteed to be the finest essence produced in the famous Rose Valley of Bulgaria.



3/- per lb.

In handsome Gold  
embossed Boxes  
or in Bottles,  
4/- per dozen,  
subject.



Of  
**WARRICK  
BROTHERS,**  
18 Old Swan Lane,  
LONDON,  
E.C.

**FOR CLEANING PLATE**

**BRADLEY & BOURDAS'S  
ALBATUM or WHITE ROUGE.**

*For Cleaning Gold, Silver, and Plated Goods.*

Since its introduction as a substitute for the ordinary Rouge, a quarter of a century ago, the sale has amazingly increased both at home and abroad. A trial is only needed to prove its superiority over other plate powders in use. Sold in Boxes at 1s. and 2s.; Tins, 6s. 6 Pont Street, Belgrave Square, and 48 Belgrave Road, London, S.W.

**E. FOUGERA & CO.,**

No. 30 NORTH WILLIAM STREET,  
NEW YORK, U.S.A.,

Importers of and Agents for the Principa  
**FOREIGN MEDICINAL PREPARATIONS  
AND SPECIALTIES.**

AGENCIES AND CORRESPONDENCE SOLICITED.

**CAUTION.**

**A. S. LLOYD'S EUXESIS,**  
**FOR SHAVING WITHOUT SOAP, WATER, OR BRUSH.**

The GENUINE Euxesis bears the following distinctive marks:—

- 1.—My full name AIMEE LLOYD on cap of tube.
- 2.—The words "Prepared only by his Widow" and my signature of AIMEE LLOYD in RED INK across labels, in addition to my late Husband's signature in black ink.

**AIMEE LLOYD**

(WIDOW OF A. S. LLOYD, formerly of 27 GLASSHOUSE STREET,)

**3 SPUR STREET, LEICESTER SQUARE, LONDON.**

**A. S. LLOYD'S EUXESIS,**  
**For Shaving without Soap, Brush, or Water.**

**CAUTION.**

The only Genuine has a yellow label printed ONLY in Black Ink, and bears the original address of the late inventor, "27 Glasshouse Street, Regent Street," the proprietors having purchased, under an administration suit, the Secret, Trade Mark, Goodwill, and Premises:

SOLE PROPRIETORS

**R. HOVENDEN & SONS,**  
**LONDON.**



# THE BEST, LARGEST, CHEAPEST

And by far the most



Superior Style in the Trade.

Full Sample of each Post Free for 2s. 6d.

## THIS SPECIAL BRAND

IS FAR SUPERIOR TO ANY IN THE MARKET.

Its low specific gravity (in comparison with other makes) speaks for itself, as the lighter the powder the more effectual as an absorbent.

It being a pure and naturally-formed substance—a native silicate of aluminium, exceeds all other compounds, such as so-called Violet Powder, &c.



## FOR BATHS OR WASHING PURPOSES, THE LUMP FULLERS' EARTH

Is specially recommended. A few lumps placed in the water when washing, or the hair of the contents of a Sixpenny Box to a Cold or Warm Bath, counteracts the hardness of the water and renders it agreeably soft. To all who possess tender or sensitive skins, or who suffer from excess of perspiration, the application of Fullers' Earth in lump or powder will be found most beneficial.

## PRICES.

£1 Assorted Orders, Carriage Paid.

Accounts amounting to £50 during the year, a Bonus (in goods at List Prices) to the value of £2 10s equal to 5 per cent.) will be given. Accounts of £100, a Bonus (in goods as above), to the value of £7 10s equal to 7½ per cent.) will be given.

TERMS—NETT, CASH WITH ORDER:

1d. POWDER, Square Packets, per gross	4/6	1/0 POWDER, Round Boxes, per gross	72/0
2d. " " " "	8/6	6d. LUMP, Square Boxes ...	" 36/0
3d. " Round Boxes	" 18/0	1/0 " " " "	" 72/0
6d. " " "	" 36/0	POWDER, in Bulk ...	... per cwt. 12/6

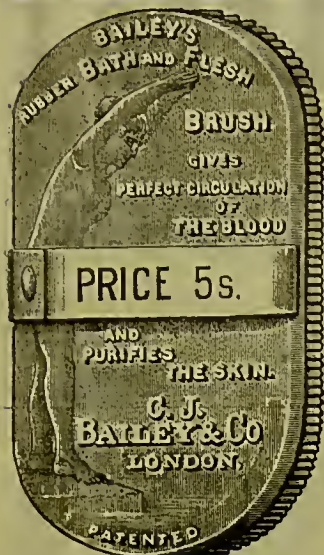
WHOLESALE PRICES AND TERMS ON APPLICATION.

Sundry and Drug Houses are invited to apply for Agencies.

# LEWIS VIGIS, BATH.



# BAILEY'S RUBBER BRUSHES.

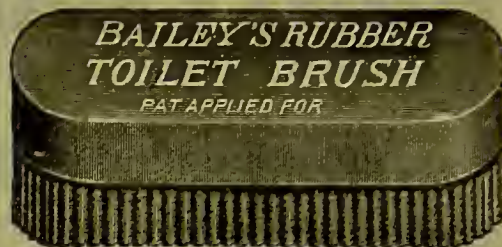


Our Bath and Flesh Brushes have been so well received by the trade, and have met with such ready sale, that it is unnecessary for us to say anything in praise of them here. We shall continue to make them of the very best quality of rubber obtainable, and, as we are advertising them largely, we have every confidence that they will continue to sell well.

## PRICE

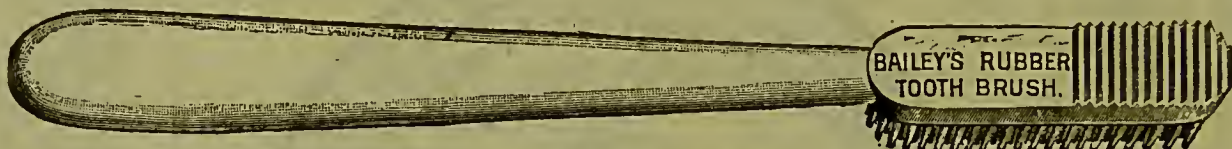
(in neat metal cases and with wood handles),  
**£2 2s. per dozen.**

## CLEAN HANDS.



Nothing has ever been invented that will so thoroughly cleanse and whiten the hands as our rubber brushes. Used with soap and water they will remove all kinds of stains without injuring the most delicate skin. They are made of the best Pará Rubber, and will last for years.

Price 1s., 2s., and 2s. 2d. each retail, or 8s., 17s., and 18s. per dozen.



We are just now introducing our tooth brushes. They are made in two sizes, of the best rubber, and are certain to give satisfaction. Our prices are 6s. and 6s. 6d. per dozen. We will be pleased to send samples at the dozen prices to any chemist who may wish to see what the goods are like, and will leave the brushes to speak for themselves.

**C. J. BAILEY & CO., 30 SNOW HILL, LONDON, E.C.**



The Chemist and Druggist says:—Mr. Arthur W. Shirley has produced a very attractive biscuit china figure, represented in the annexed engraving. The advertisement is effective without being at all vulgar, and the little erier, we expect, will soon be a familiar figure about the country.

# OYEZ! OYEZ!! OYEZ!!!

THIS ELEGANT BISCUIT-CHINA FIGURE, AN ORNAMENT TO ANY SHOP,

## GIVEN AWAY

To Purchasers of 25/ worth of

# SHIRLEY'S A1 BRAND MENTHOL

OR TWO IF 40/ ORDER IS PLACED.

The following special parcels have been arranged to suit all classes of trade:—

<b>PARCEL 1. 25/.</b> 4 doz. 2d. 1 doz. 3d. 2 doz. 3½d. 3 doz. 4d. 2 doz. 6d.	<b>PARCEL 2. 25/.</b> 4 doz. 6d. 2 doz. 4d. 1 doz. 1s.	<b>PARCEL 3. 25/.</b> 3 doz. 3d. 2 doz. 1s. 1 doz. 4d.	<b>PARCEL 4. 25/.</b> 1 doz. 9d. 2½ doz. 1s. ½ doz. 1s. 6d.
<b>PARCEL 5. 40/.</b> 4 doz. 2d. 2 doz. 3d. 3 doz. 3½d. 5 doz. 4d. 4 doz. 6d.	<b>PARCEL 6. 40/.</b> 5 doz. 6d. 3 doz. 4d. 2½ doz. 1s.	<b>PARCEL 7. 40/.</b> 4 doz. 6d. 4 doz. 4d. 1 doz. 9d. 2 doz. 1s.	<b>PARCEL 8. 40/.</b> 4 doz. 1s. 2 doz. 9d. ½ doz. 1s. 6d.

By calculating what each of the parcels would realise when sold, it will be found that they yield an average profit of 80 per cent to the retailer on his outlay.

Numerous letters have been received already, testifying to the satisfaction given by this little figure. One firm writes—"We have just received the figure, and must indeed say we are highly pleased with it, and have it in a prominent place on our counter." Another writes—"It is quite the centre of attraction of my establishment." Another—"Figures sold a dozen cones first day of showing them."

**A1 COCAINE & MENTHOL 6d.**  
**TOOTHACHE TUBE.**

12 ON A CARD. 3/6 DOZ.

Sells really well.

**A1 CORN & WART TUBE, 6d.**

12 ON A CARD. 2/3 DOZ.

BE READY FOR THE SEASON.

**ARTHUR W. SHIRLEY, 30 PATERNOSTER SQUARE, LONDON, E.C.**



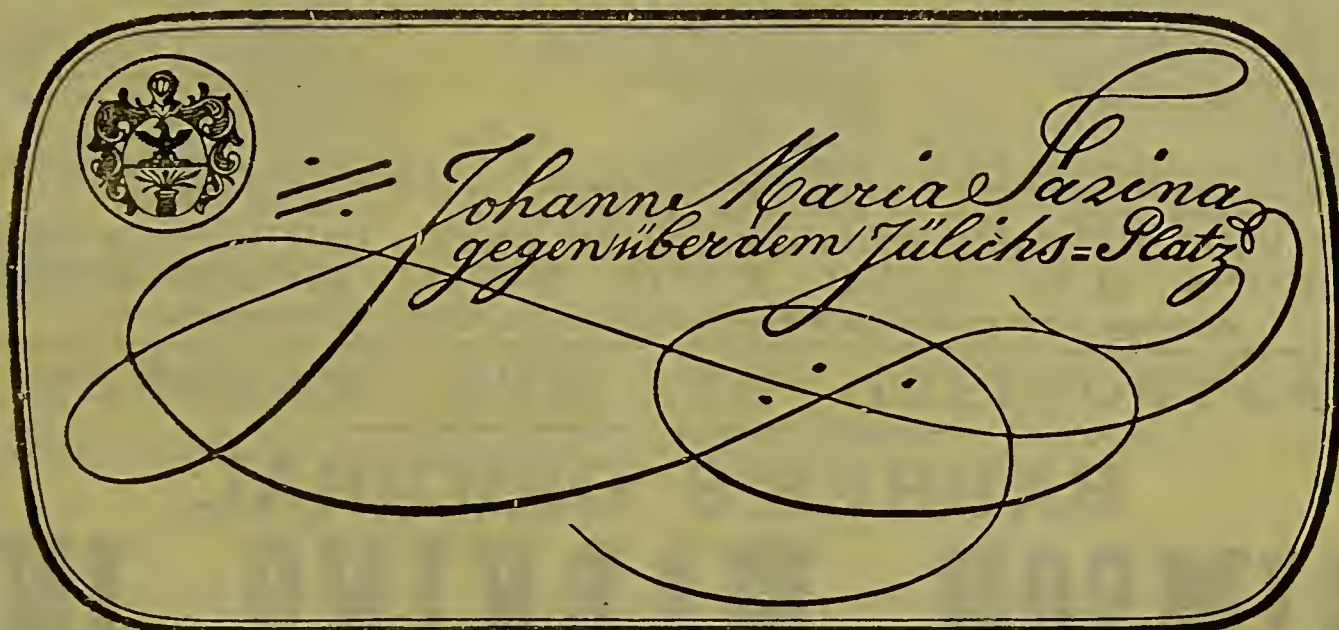
**EAU DE COLOGNE**

OF THE MOST ANCIENT DISTILLER,

**JOHANN MARIA FARINA,***Opposite the Julichs Place, COLOGNE.*

ESTABLISHED A.D. 1709.

PRIZE MEDALS:—LONDON, 1851 AND 1862; OPORTO, 1865; PARIS, 1867; VIENNA, 1873.

By appointment, Sole Purveyor to Her Most Gracious  
Majesty Victoria, Queen of Great Britain & Ireland;  
Their Royal Highnesses the Prince and Princess of  
Wales; Albert II, King of Saxony;Their Majesties, William II., German Emperor and  
King of Prussia; Alexander II., Emperor of Russia;  
Francis Joseph, Emperor of Austria; Lewis, King  
of Portugal.In consequence of increasing inquiries from the Colonies for my Eau de Cologne, the only genuine, I  
beg to submit my Price Current.At the same time I beg to call special attention to the following facsimile of my Trade Mark, for the  
protection of which I have instituted thirteen suits in the High Court of Chancery, all of which have been  
decided in my favour.All similar Labels being more or less imitations of the same, I shall proceed as before against all persons  
selling or exposing for sale any such imitations.I only prepare one quality of Eau de Cologne. This quality never varies in the slightest degree, and there  
has not been the smallest change in the manufacture since the year 1709, when it was invented by my ancestor.Orders equal to at least 12 dozen short bottles will be promptly executed at 13s. 6d. per dozen, against my  
bill drawn at three months from the date of invoice, delivered free on board the export ship, at Rotterdam,  
Antwerp, Hamburg, or Bremen, no charge being made for the case and packing, but insurance charged extra.  
7½ per cent. discount is allowed for orders equal to at least 100 dozen, but on no smaller quantities.I may add that, as I do not draw on the Colonies, all Orders must be accompanied by a credit on some  
London House, or permission to draw on same at three months.The Goods can also be shipped in transit through London at a very small additional expense, full particulars  
of which may be obtained of my Sole Agents for Great Britain and Ireland:—**MESSRS. J. & R. McCracken,**  
**No. 38 Queen Street, Cannon Street, London, E.O.**

The following are the sizes of my bottles:—

No. 1. Long Green Flasks	—	—	—	—	—	—	12 bottles	} to one dozen.
" 2. Short White Bottles	—	—	—	—	—	—	12 "	
" 3. Double ditto	—	—	—	—	—	—	6 "	
" 4. Wickered Bottles (small)	—	—	—	—	—	—	8 "	
" 5. ditto (medium)	—	—	—	—	—	—	4 "	
" 6. ditto (large)	—	—	—	—	—	—	2 "	

**JOHANN MARIA FARINA.**

OPPOSITE THE JÜLICHS PLACE.

COLOGNE: January, 1889.



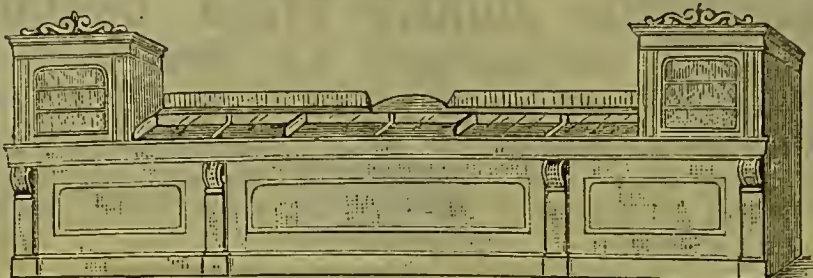
# W. S. YATES

(ESTABLISHED 1864),

## CHEMISTS' AND GENERAL SHOP FITTER,

SHOP FRONT BUILDER AND GLASS SHOWCASE MAKER,  
9 CAMDEN STREET, LIVERPOOL.

PLANS & ESTIMATES  
supplied for Work  
in any part of the  
Kingdom.



ALTERATIONS  
and REMOVALS also  
Estimated for.

The following are some of the Chemists' shops fitted by W. S. Y. :-

Mr. AGNEW (2 shops), Great Homer Street,  
Liverpool.  
" WARHURST (4 shops), Stanley Road, Liverpool.  
" MARTIN (2 shops), Lime Street, Liverpool.  
" HALL, Breckfield Road, Liverpool.  
" THOMAS, Lark Lane, Liverpool.  
" BLACKBURN (2 shops), Tuebrook, Liverpool.  
" BUDDEN (5 shops), Dale Street, Liverpool.  
" WOODCOCK, Scotland Road, Liverpool.  
" FLETCHER, Breck Road, Liverpool.  
" PURCELL, Walton Road, Liverpool.  
" EVANS, Elam Bank, Liverpool.  
Messrs. KNOWLES & WRIGHT, Castle Street,  
Liverpool.  
Mr. CRAWLEY, Rice Lane, Liverpool.  
" CALEY (2 shops), Stanley Road, Liverpool.  
" ADAMS, Granby Street, Liverpool.

Mr. CLARKE, Warwick Street, Liverpool.  
" JEWELL, London Road, Liverpool.  
" BROWN, Stanley Road, Liverpool.  
" HUGHES, Mill Street, Liverpool.  
" HARRIMAN, Brownlow Hill, Liverpool.  
" JOSEPH, Great Homer Street, Liverpool.  
" SANT, West Derby Street, Liverpool.  
Messrs. J. H. & S. JOHNSON, Church Rd., L'pool.  
Mr. JONES, County Road, Liverpool.  
" PARRY, Stanley Road, Liverpool.  
" EDWARDS, Litherland.  
" WRIGHT, Leek.  
" THOMAS, Aberystwyth.  
" BOWEN, Criccieth.  
" R. PHEYSEY, Waterloo.  
" T. MARTIN (2 shops), Waterloo.  
" EVANS, Millam, Cumberland.

Mr. BREWITT, Sandy, Bedfordshire.  
" BAKER, Chester.  
THE CHEMIST CO., Wem, Salop.  
Mr. BENNETT, Widnes.  
" ROSE, New Brighton.  
" CLEMENTS (2 shops), Egremont.  
" LEWIS, Rock Ferry.  
" COLE, Cloughton.  
" MARSON (drawers only), Stafford.  
" WOODS (cases and drawers), Warrington.  
" RICHARDSON, Fern Grove, Liverpool.  
Messrs. WALKER & SON, Myrtle St., Liverpool.  
Mr. RIGHTON, Southport.  
" A. M. SUDLOW, Southport.  
" SUART, Penny Street, Lancaster.  
" PREECE, Oxtan.  
" CHABOT, West Kirby.

SECOND-HAND FIXTURES OCCASIONALLY ON HAND. DENTISTS' CASES, &c., &c.  
SHOPS TO LET FOR NEW BUSINESSES.

All kinds of Glass Work in Name Plates, Shelves, Outside Lettered Slips, &c.

PATRONISED BY HER MAJESTY.

## BARBER'S ORIGINAL CRIMSON MARKING INK,

WHICH IS CHANGED BY HEAT TO A JET BLACK.



Put up for Retail Sale in 6d., 1s., 2s., 2s. 6d., and 5s. Bottles

ALSO

### BARBER'S CONCENTRATED LIQUID COCHINEAL

FOR COLOURING JELLIES CUSTARDS, ETC.

Put up in 6d. and 1s. Bottles.

ALSO BARBER'S ARTIFICIAL IVORY FOR FILLING DECAYED TEETH,  
1/- per Packet.

MANUFACTURED ONLY BY THE PROPRIETORS—

## G. BARBER & CO., CLUB MOOR, LIVERPOOL.

Can be obtained through any of the Wholesale Firms in Great Britain, or from FELTON, GRIMWADE & CO., Melbourne; ELLIOT BROS., Sydney and Brisbane; KEMPTHORNE, PROSSER & CO., Dunedin and Auckland; FELTON, GRIMWADE & CO., Wellington; or direct from the Manufacturers—G. BARBER & CO., Club Moor, Liverpool, England.



# SHOP FITTINGS.

---

THE undersigned beg to call the attention of the Trade to this department of their business. They are in a position to tender for same to suit every description of shop, or any measurements, and can guarantee them to be of the very best workmanship.

---

SHOW CASES, &c., of every description, for full particulars of which see Prices Current.

Shop Rounds, Labelling, &c., estimated for and undertaken at customers' own shops if desired.

---

The following gentlemen, having recently had their shops refitted throughout, can be referred to as to quality of work:—

Mr. VERDON, Stockport.

„ HAMMETT, Manchester.

„ MORRIS, Portmadoc.

„ STEPHENSON, Liverpool.

Messrs. PEARSE & CO., Limerick.

Mr. JACKSON, Blackpool.

„ WITHERS, Blackpool.

„ McIVER, Dingwall.

Mr. ALLAN, Inverness.

*P.S.—Can quote Show Cases, &c., specially manufactured for Export to Hot Climates, &c.*

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**LIVERPOOL:**

**EVANS, SONS & CO.**

**LONDON:**

**EVANS, LESCHER & WEBB.**



# GOING X LINES.

## LITTLE BEAUTIES FEEDERS.

THE BEST FEEDERS MADE.

All fitted with best ENGLISH Black Indiarubber Tube.



1s.—Each in box, with spare tube and brushes, equal to most 1/6 Feeders .....	5/6 doz.
6d.—Green Glass Screw Neck, Loose .....	34/- gross.
6d.—" Box Top Corks, Loose .....	30/- "
6d.—White Glass " " " .....	33/- "

The 6d. may be had 1 doz. in wood box at 2s. gross advance.

## TEETHING PADS.

No. 826.

1 dozen on Card, Bone and Indiarubber Teat, 2/6 dozen.

## GLYCERINE PURGATIVE SYRINGES.

No. 821.—All Glass .....	3/6 doz.
" 822.—Glass, with Vulcanite Pipe (cheap form) .....	7/- "
" 827.—" " Piston Pipe, best make .....	12/- "
" 828.—Glass, with Vulcanite Mounts and Nickel-plated Piston .....	13/- "
" 829.—All Vulcanite .....	13/- "

## COMPRESSED CHLORATE OF POTASH.

In Tin Boxes with Leather  
Labels, 40 Pellets, about, in  
each Box.

1s. 6d. per Dozen Boxes.

17s. Od. per Gross.

1 lb. Bottles, 2s. 1b.

ANY FORMULÆ MADE  
UP IN PELLETS AT  
SHORT NOTICE.

## FULLER'S EARTH.

In elegant Decorated Tin Boxes, which may be used as Puff  
Boxes when empty.

No. 626.—1 dozen on cartoon, 3/- doz.

May also be had filled with Violet Powder, No. 626v, 3/3 doz.

No. 748.—NAIL FILES, Real Ivory, 1 doz. assorted on Card,  
3/- doz.

PLEASE CALL AND SEE OUR SHOW ROOM, WHICH IS FULL OF NOVELTIES!

IN ORDERING KINDLY STATE NUMBERS TO AVOID MISTAKES.

QUOTATION for all SUNDRIES on APPLICATION. SPECIAL PRICES for LARGE QUANTITIES.

## HOCKIN, WILSON & CO.

13 to 16 NEW INN YARD, 186a TOTTENHAM COURT ROAD, LONDON, W.;  
And 64 Corporation Street, MANCHESTER.





# ENGLISH MADE WILLOW BOXES.



TIME, TEMPER, and MONEY can be saved by using *Sound, Substantial, Stout* Willow Boxes, instead of *Weak, flimsy, slight* ones. With the sole exception, perhaps, of bad corks, there is no article used by the chemist which so much tries his patience as a faulty, inferior willow box; and what can possibly be more annoying to a customer than, upon arriving home with a box of ointment, to find (no unusual occurrence where faulty boxes are used) the box all in pieces, and the ointment—well, anywhere but in the box? It may be said, "This is a trifle," but in business no detail can be called trifling; it is doubtless extremely difficult for a chemist constantly handling boxes all day long to realise the effect produced upon the public by the use of one box better than another; but, as a matter of fact, the purchaser of, say, any article put up in a box, as a rule, knows nothing whatever of the contents, and can only judge it by the receptacle in which it is placed; he naturally infers that a chemist who takes pains to obtain a sound well-finished box will most decidedly take infinitely greater pains about the contents; and it does not require much imagination to read the thoughts of a customer in the reverse case. Messrs. Ayrton & Saunders, of Liverpool, have spent over 20 years in completing machinery to produce absolutely perfect Willow Boxes, and now, in order to place them within the reach of every chemist in England, Wales, Scotland, Ireland, and the Colonies, have made special arrangements with the leading Drug, Patent Medicine, and Sundry houses of the kingdom to stock and supply their celebrated IXL Brand at the following prices, less usual discount:—

	1 dr.	2 dr.	$\frac{1}{2}$	1	1½	2	3	4	6	8 oz.	
DEEP.....	8d.	9d.	11d.	1/-	1½	1¼	1/10	2/3	3/-	3/6	Nested
CUT DOWN...	7d.	8d.	9d.	10d.	1/-	1/3	1/6	2/-	2/6	3/-	4/-

Chemists are, however, urgently requested to distinctly order the IXL Brand, and to insist upon having them. Should there be any difficulty in procuring a supply, Messrs. Ayrton & Saunders will be glad to forward direct orders, carriage paid, upon receiving Postal Order or Cheque, at above *net* prices.

*Special sample cases, containing full series of Willows, forwarded to any foreign firm on receipt of business card.*

## MESSRS. AYRTON & SAUNDERS

Are also manufacturers of every description of Cardboard Boxes—Round, Square, and Oval—and will be pleased to forward samples and estimates on application.

Postal Address—149 DUKE STREET, LIVERPOOL

Telegraphic Address—"SUNDRIES LIVERPOOL."

Telephone No. 423.



# CARBOLIC POWDER, £4 TON.

1-ton lots and upwards.

CARBOLIC PINK POWDER, 5/-, 7/6, and 10/- per cwt., in bags or casks.

HANDSOME LARGE DECORATED BLACK AND GOLD TIN BOXES

Holding 1½ lbs. (usual 1/- size), 3/- doz. Ditto, LARGE SIZE (usual 1/6 size), holding about double quantity, 4/8 doz.

PALE CARBOLIC ACID, 99 per cent. (No. 5), and CHLORIDE OF LIME below market prices.

CRUDE CARBOLIC ACID (Brown), 9d., 1/-, and 1/6 Gallon; also in patent stoppered bottles, labelled, ½ pint (1/- size), 4/- dozen.

DARK SANITARY FLUID (to be used with 80 parts of water, making a *milky fluid*), 2/- PER GALLON.

10 PER CENT. DISCOUNT OFF ABOVE PRICES FOR CASH WITH ORDER.

All goods delivered free in London or suburbs, or to rail or docks. THE CHEAPEST HOUSE IN THE TRADE.

HAMILTON & CO., HIGH STREET, WANDSWORTH, LONDON, S.W.

## FOR ALL CANINE AILMENTS. SPRATTS PATENT, LIMITED, DOG MEDICINES.

Pamphlets on Canine Diseases for gratuitous distribution. Show Cards and Handbills Supplied.

Address: SPRATTS PATENT, LIMITED, LONDON, S.E.

SPRATTS PATENT (AMERICA) LIMITED, 239 to 245 East 56th Street, NEW YORK, U.S.A.

OR YOUR WHOLESALE HOUSE.

ESTABLISHED  
NEARLY  
50  
YEARS.

### DAY & SONS'

### WORLD-FAMED HORSE AND CATTLE MEDICINES.

### THE LARGEST SALE IN THE WORLD.

AWARDED  
OVER  
30  
PRIZE  
MEDALS.



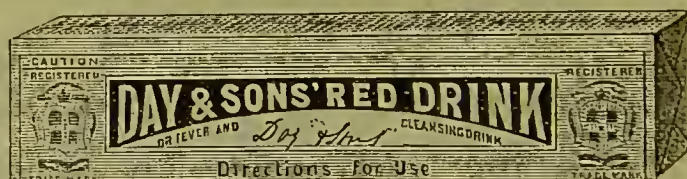
FOR Colic or Gripes in Horses and Cattle.  
FOR Debility and Chills in all Stock.  
FOR Scour in Calves and Lambs.  
FOR Hoven or Blown Cattle and Sheep.  
FOR Shivering Fits in Horses.  
FOR Weakness after Lambing or Calving.

PRICE—10/ PER HALF-DOZEN, OR 19/ PER DOZEN.



FOR Healing all Wounds in all Animals.  
FOR Kicks, Stake Wounds, Broken Knees in Horses.  
FOR Cracked Heels and Saddle Galls in Horses.  
FOR Sore Teats and Swollen Udders in Cows and Ewes.  
FOR Dressing and Anointing in Lambing and Calving.  
FOR Every Horse-keeper, Farmer, and Shepherd.

PRICE—2/6 PER BOTTLE.



FOR Fevers, Yellows, Indigestion, and Dulness  
FOR Red Water, Costiveness, and Mawbound.  
FOR Disordered System in Cattle.  
FOR Bad Cleansing after Calving.  
FOR Preventing Milk Fever and Inflammation.  
FOR Purifying and Increasing the Milk.

PRICE—12/ PER DOZEN PACKETS.



FOR Ill Condition, Off Appetite, Disordered System.  
FOR Heat-lumps, Itching, and Scurvy Skin.  
FOR Hidebound, Bad Water, and Blood Ailments.  
FOR Coughs, Colds, Sore Throats, and Fevers in Horses.

IN CANISTERS. PRICE—3/6, 7/, 14/, AND 21/.

THE "ORIGINAL" UNIVERSAL MEDICINE CHESTS, £2 4s. and £5. FOR ALL DISORDERS OF HORSES, CATTLE, CALVES, SHEEP, AND LAMBS.

Only Prepared by the Inventors, DAY & SONS, CREWE, CHESHIRE.

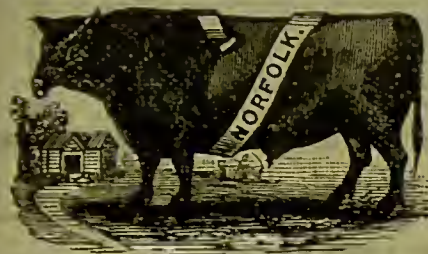
May be obtained of Burgoyne, Burbidges & Co.; Sanger & Sons; Evans, Lescher & Webb; Barclay & Sons, &c., London; Evans, Sons & Co., Liverpool, &c. Exporters are invited to apply for terms; Liberal Discount offered.



By Appointment to H.R.H. the late Prince Consort.

**BIGG'S SHEEP AND LAMB DIPPING COMPOSITION,**  
For Destruction of Ticks, Lice, &c., and Prevention of Fly.  
HAS NOW BEEN USED WITH GREATEST SUCCESS FOR NEARLY HALF A CENTURY.  
PAMPHLETS ON APPLICATION.  
LEICESTER HOUSE, GREAT DOVER STREET, BOROUGH, LONDON.  
IN ANY TOWN WHERE NO AGENT EXISTS CHEMISTS ARE REQUESTED TO APPLY.

## TO RETAILERS OF HORSE AND CATTLE MEDICINES



THE "NORFOLK" CONDITION DRENCHES, for Cows, Fattening Bullocks, Sheep, and Pigs  
Retail .. .. . 1/2-do. cases, 4/6; 1 doz., 9/-; 3 doz., 22/6  
Wholesale .. .. . 3/3; " 6/6; " 17/6  
THE "NORFOLK" CORDIALINE or PAIN KILLER, for Horses, Neat Stock, Sheep and Lambs  
Retail .. .. . 1/2-do. cases, 6/-; 1 doz., 12/-; 3 doz., 31/6  
Wholesale .. .. . 4/-; " 8/-; " 24/-  
With usual cash discounts at all London Medicine Houses.

F. SUTTON & CO., NORWICH, are now advertising these celebrated Preparations in the leading agricultural papers, and they are in constant use on the Royal Farms and by noted Breeders all over the kingdom, and especially by more than 3,000 Cowkeepers in Great Britain and Ireland. When once used they are sure to be adopted, as there are no similar preparations equal to them in the market.

## GRIFFITHS' SUPERFINE ROUGE

In 6d. and 1s. Boxes.

(As supplied to Manufacturing Silversmiths all over the World.)

## GRIFFITHS' PLATE POWDER

In 6d. and 1s. Packets.

(For Household and general purposes.)

TO BE OBTAINED OF ALL WHOLESALE HOUSES, OR OF

## T. M. GRIFFITHS,

Putty Powder, Steel Polish, & Polishing Paste Manufacturer,  
1a Upper Charles Street, London, E.C.

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YOUR CUSTOMERS WILL BE ASKING FOR

WILSON'S

## PATENT STICKY FLY PAPERS

During the coming season, and it will be a great convenience to them, and a source of profit to yourselves, to stock these. They are put up in a convenient form and will retain their saleable condition for any length of time.

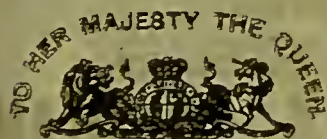
Wholesale Terms, 3s. per gross net, Three months for 50-gross lots.

This is not a big lot, as a number of Retail Chemists sold from 15 to 20 gross even last year. You will be advertised in this Journal throughout the season as Wholesale Dealer, and this is sure to bring you a share in what is really a new trade. Please send on your order at once to

S. WILSON, Chemist, St. Helen's, Lancs.

Retailers who cannot procure through Wholesale Dealers are requested to send Postal Orders on direct. 4s. 6d. per gross.

Used on the Royal Farms at Windsor, Osborne, and Sandringham, and by the principal Stockbreeders everywhere for nearly 60 years.



## DAY, SON & HEWITT'S



## HORSE, CATTLE, AND SHEEP MEDICINES.

### THE CHEMICAL EXTRACT.

For assuaging pain and inflammation in all wounds, saddle galls, strains, bruises, swellings and relaxed tendons in Horses. For paining after calving and lambing, and for swollen udders and sore feet.

2s. 6d. per Bottle; 1-dozen Box, 7s. 6d.

### THE RED DRENCH.

Celebrated for inflammatory disorders, such as fevers, pleurisy, foot-and-mouth complaints, yellows, surfeit, and red-water. Also for difficult calving and lambing. Admirably adapted for cleansing and checking feverish symptoms in Cows and Ewes after a bad time of parturition.

For Sheep, 3s. 6d.; for Cattle, 13s. per dozen Box.

### THE GASEOUS FLUID.

Unmatched for colic or gripes and debility in Horses, for colds, chills, shivering fits, flux and diarrhoea in Cattle, Calves, and Sheep. For Ewes weakly after lambing and blown Cattle and Sheep, its effects are marvellous.

20s. per dozen Box.

### THE GASEODYNE.

Used as laudanum in uncontrollable spasmodic pains and violent bowel complaints. Invaluable for parturition in Mares, Cows, and Ewes.

3s. 6d. per Bottle; 1-dozen Box, 10s. 6d.

### THE RED PASTE BALLS and RED POWDERS.

For ill-conditioned Horses and Colts; invaluable after hard hunting or driving. For coughs, colds, staring coat, itching, swollen legs and want of strength. The powder given in the feed will produce fine appetite and tone.

7s. 6d. per dozen; 3-dozen Box, 21s.

### THE BLACK PHYSIC BALLS.

These Balls are matchless for thoroughly cleansing the system of all impurities, and for assisting in the expulsion of Worms. Their purgative action soon relieves Costiveness of the Bowels, and checks all Feverish Symptoms arising from gross habit.

Price, 8s. per dozen; Box containing 3 dozen, 23s.

### THE BRONCHOLINE.

The great and reliable remedy for Husk or Hoose in Cattle, Heifers, Calves, and Sheep. Its gaseous odour destroys the worm or parasite in the windpipe, removes the hard cough, and soothes the lungs and other organs.

2s. 6d. per Bottle; 1-dozen Box, 7s. 6d.

### THE "KEY TO FARRIERY."

A small work published by us on the general ailments of stock, their treatment and cure.

Large Edition, in Cloth, 2s. 6d.; Small Edition, 1s.

The Stockbreeder's Medicine Chest. No. 1 contains a complete assortment of all our preparations for treating diseases of stock generally, £6 6 0  
The Stockbreeder's Medicine Chest. No. 2 is suitable for ordinary Farm use, and contains a useful selection of the above Medicines .. 2 16 0  
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The Horsekeeper's Medicine Chest. No. 4 contains a smaller assortment, but has everything requisite for all ordinary ailments in Horses 2 17

Prepared only by DAY, SON & HEWITT, 22 DORSET STREET, LONDON, W.

LIBERAL DISCOUNT TO FOREIGN BUYERS.

LIST AND PARTICULARS OF AGENTS ON APPLICATION.



# MELVILLE'S "OSSOLINE"



THE only preparation which speedily removes Splints, Curbs, or Bony Formations; and the safest and most effectual cure for Bone-spavin, Ring-bone, and Side-bone, without leaving any mark or blemish, entirely superseding "firing."

From Mr. MATTHEW DAWSON.

The Celebrated Trainer.

"Manor House, Exning, Newmarket, May 21st, 1886.

"Sir,—I have tried the 'OSSOLINE' with excellent effect, and I think it the best remedy for Curbs, Splints, and other bony excrescences I have used.

"Yours truly, M. DAWSON."

From Mr. W. GILBERT.

"Park Paddocks, Newmarket, March 3rd, 1883.

"Gentlemen,—I have found your 'OSSOLINE' very efficacious when I have had occasion to use it on Splints or Curbs, and can cordially recommend it.

"Yours truly, W. GILBERT."

From Captain T. C. P. CALLEY.

"Regent's Park Barracks, London, N.W., Feb. 29, 1888.

"Sir,—I have much pleasure in testifying to the efficacy of your 'OSSOLINE.' I used it for a very large splint just below the knee, in-ide, on a young carriage mare, which it entirely removed in about a fortnight, although the mare was worked all the time.—Yours faithfully,

"T. C. P. CALLEY, Captain, 1st Life Guards."

From Mr. EDWARD McDONALD.

"Belle Ville, Ashtown, Dublin, Jan. 23rd, 1888.

"Dear Sirs,—I have much pleasure in bearing testimony to the efficacy of your 'OSSOLINE.' I have used it on Curbs, Splints, and other kinds of bony enlargements, with the greatest success, and have no hesitation in strongly recommending it.—Yours faithfully,

"E. McDONALD."

In Bottles, Price: 2/6 size, 24/ per doz.; 5/ size, 48/ per doz.  
10/ size, 96/ per doz.; with usual discount.

Sole Proprietors—

## HENRY DOWN & CO.

### WOBURN, BEDS.

Wholesale Agents—BARCLAY & SONS, LIM.,  
and W. EDWARDS & SON, London.

SMITH & SONS, Magdalen Street, Norwich.

Trade Mark.



Registered.

THE  
ASSOCIATION for the SUPPLY of PURE VACCINE LYMPH,  
12 PALL MALL EAST, LONDON, S.W.  
SOLE AGENTS FOR DR. WARLWORTH'S CALF VACCINE.

Tubes, 2s. each; Half Tubes, 1s. each. Pomade in vials, 5s.  
HUMAN VACCINE, from healthy children only, microscopically examined and source quoted. Tubes, two-thirds full, 1s. 8d. each; Tubes one-third full and Lancet-charged Points, 1s. each; Pin-points, 1s. 1d. each. Eighteen charged Small Points, 5s. Tubes, two-thirds full (same as those mentioned above, but without source), in quantities for export, £5 per 100 Tubes. Pin-points uncharged, 1s. per dozen. Vaccine Ejectors 1s. 8d. each, including postage. Vaccinations by appointment. P.O.O.'s (including postage, and crossed London and Westminster Bank), with orders, payable to  
EDWARD DARKE, Secretary  
Office hours, 10 to 4. Saturdays 10 to 2.

IN WRITING MENTION THIS PAPER.

## COMFORT FOR THE FEET.

Corns, hard or soft, and Bunions may be removed, and Enlarged Toe Joints may be reduced, by the use of the NEW FRENCH CORN PLASTER. The sole Importer and proprietor is M. F. THOMPSON, HOMOEOPATHIC CHEMIST, 17 GORDON STREET, GLASGOW, from whom the Plaster may be had in Packets, by post, for Fourteen Stamps. Those who are troubled with the discomfort of Corns or Bunions will be glad to have attention called to this remedy, as it removes pain very speedily. It is a simple Plaster, which can be used without any inconvenience, as it takes up imperceptible room in the boot.

Wholesale, 9/ dozen, 4/9 half dozen, 2/6 quarter dozen.

All Post Free for cash with Order.

BEWARE OF ALL IMITATIONS.

## The Original Arnicated

ESTABLISHED

A.D.

1846.

Please

see that  
YOUNG'S

goods are  
supplied, as there  
are many worthless  
imitations.

## Corn and Bunion Plasters.

### HENRY YOUNG, Manufacturer, LONDON.

The following is respectfully commended to the  
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## FOWLER'S CORN, BUNION, & CHILBLAIN PLAISTER,

PRICE 1s. 1½d. PER BOX,

[2]

Has been extensively used in Royal and distinguished circles for over half a century, still maintaining its pre-eminence against all competition.

Relief immediate, cure certain, and comfort, however tight the boot.

## W. F. SMITH, M.P.S.,

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ORDERS FROM ABROAD EXECUTED THROUGH SHIPPERS

## DR. RENNER'S ESTABLISHMENT FOR VACCINATION WITH CALF LYMPH,

186 (late 228) Marylebone Road, London, N.W.

VACCINATION FROM THE CALF DAILY FROM 11 TO 12 O'CLOCK.

Reduced price of Calf Lymph (daily fresh).

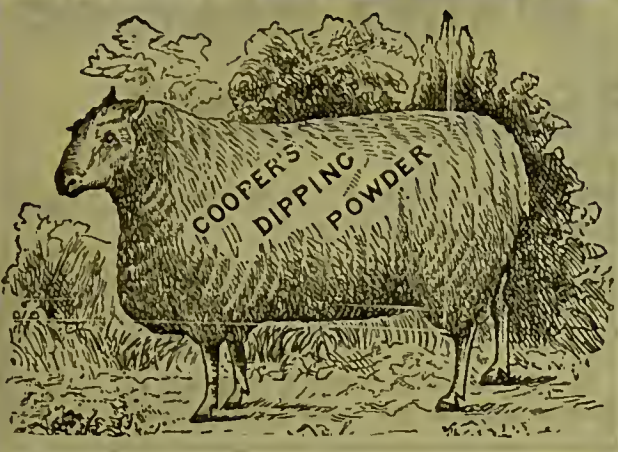
Tubes	Large	...	...	2s. each, or 3 for	5s. 6d.
	Small	...	...	1s. "	2s. 9d.
Points	Large	...	...	1s. "	2s. 6d.
	Small	...	...	9d. "	2s.
Squares	...	...	...	2s. 6d. each.	

Registered Telegraphic Address—"VACCINE LONDON."

Sent on receipt of remittance addressed to the Manager of the Establishment. Discount to the Trade.



# THE ONLY ORIGINAL POWDER DIP



USED ON  
SIXTY MILLION  
SHEEP  
ANNUALLY.

CHEAPEST,  
SAFEST,  
HANDIEST, BEST,  
FOR

## TICKS, LICE, FLY, SCAB.

LAST YEAR ALONE  
THE SALE  
INCREASED  
250 TONS.

IN GENERAL USE SINCE 1843.

BEWARE OF IMITATIONS.

Attractive Handbills, Show Cards, Posters, &c., with Name and Address,  
supplied gratis on application.

SOLE PROPRIETORS AND MANUFACTURERS,  
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*LONDON OFFICES—50 and 50a Palmerston Buildings, Bishopsgate Street, E.C.*

# PEILE'S SHEEP DIP.

## NON-POISONOUS.

EFFECTUALLY DESTROYS ALL VERMIN.

MIXES READILY WITH COLD WATER.

IMPROVES THE QUALITY OF THE WOOL.

In manufacturing this Dip great care is taken only to include such ingredients as will improve the quality of the wool and be beneficial to the Sheep, at the same time proving fatal to all parasites and vermin. Great care is also taken to insure the Dip being of uniform strength.

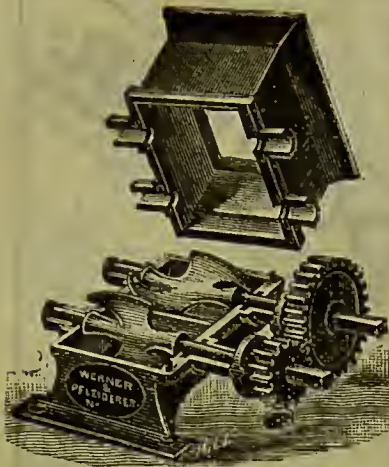
SAMPLES AND PRICES ON APPLICATION.

**AGENTS WANTED AT HOME AND ABROAD.**

Sole Manufacturer:

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Size 3, Type I, for 1-lb. Mass.

## THE "UNIVERSAL" KNEADING AND MIXING MACHINE FOR PILL MASS MAKING,

ALSO FOR

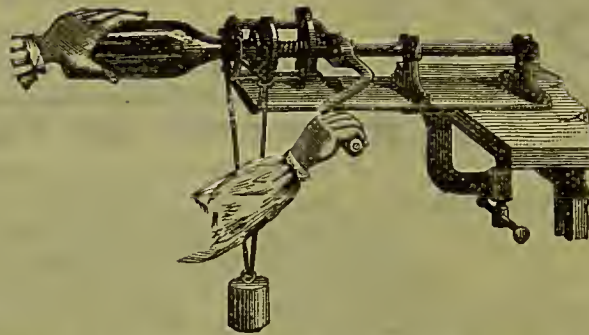
Horse Balls, Tooth Pastes, Ointments, Soaps, Powders, and for  
general Mixing and Incorporating.

REPLACES WITH ADVANTAGE ALL OTHER APPLIANCES FOR THESE PURPOSES.

Made in various sizes, to do from  $\frac{1}{2}$  lb. up to 1 ton at a time.**WERNER & PFLEIDERER,** 86 Upper Ground St., LONDON, S.E.,  
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## NEW CAPSULING MACHINE

The only Machine  
which leaves no crease  
or pleat on the  
Capsule.



Can be fixed to any  
Counter.  
A single pull of the lever  
is sufficient  
to fix the Capsule.

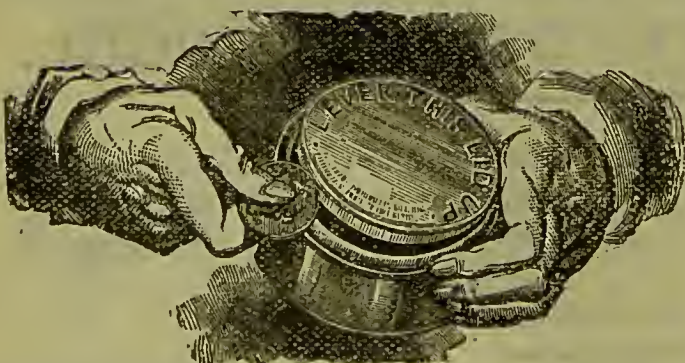
Patentee—**C. MELIN,** 37 Crutched Friars, LONDON, E.O

## THE SELF-OPENING TIN BOX COMPANY

(GRIFFIN'S PATENT),

ALBION TIN WORKS, YORK ROAD, KING'S CROSS, LONDON, N.

Telegraphic Address—"TIN BOX LONDON."

Boxes ready made up, or the Patent Tops only (ready  
for making up), are supplied.

**THE NEW TIN BOXES** for all kinds of  
Hermetically  
Sealed Preserved Foods, DRUGS and CHEMICALS.

**THE NEW TIN BOXES** are as cheap as  
the ordinary  
Boxes, require no soldering up, and can be opened with a  
penny piece.

**THE NEW TIN BOXES** are being adopted  
by the largest  
Food-preserving Houses and CHEMISTS, to whom  
references can be given.

**THE NEW TIN BOXES** are also perfect  
for Tea and  
Coffee Canisters, Biscuit Boxes, Confectionery, Paints,  
Oils, Varnishes, Soaps, &c.

**THE NEW TIN BOXES** are described by the *Times*, *Standard*, *Chronicle*, *Illustrated News*, *Engineer*,  
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most elegant invention ever made."



**GREAT REDUCTION IN PRICE OF GLASS BOTTLES, SYPHONS, ETC.**

ESTABLISHED TWENTY-FIVE YEARS.

ROUND SHOULDER OR LIME  
JUICE BOTTLES.  
1 2 3 4 6 8 10 oz.  
2/9 3/3 4/6 5/6 6/6 7/6 8/6 14/ gross.  
12 16 20 oz.  
13/ 20/ 22/ gross.  
VIALS (Long, Medium, or  
Short Series).  
1/2 oz., 2/3; 1 oz., 3/; 2 oz., 4/6 gross.  
Good quality.  
KALI (CONFECTIONER'S)  
BOTTLES.  
4 6 8 10 12 20 oz.  
6/ 7/6 9/ 14/ 17/ 24/ gross.  
GLASS SYRINGES (Best Quality).  
1/2 oz., 14/; 1 oz., 13/; 1 oz., 27/;  
2 oz., 49/ gross.  
All and every kind of Bottle made,  
and prices given for any particular  
pattern.

SCREW FEEDING BOTTLES, Black Fittings complete, 10 gross lots, 30/ per gross.

WONDERFUL PRICES.

[SPECIAL PRICES ON APPLICATION.]

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SHOWROOMS AT 82 HATTON GARDEN, LONDON, E.C.



BEST WHITE FLINT OVAL DIS-  
PENSING OR PERFUMERY BOTTLES  
2 3 4 6 8 oz.  
6/ 7/ 8/6 9/6 10/6 per gross.  
BEST WHITE FLATS.  
2 3 4 6 8 oz.  
6/ 7/ 8/6 9/6 10/6 per gross  
PILL BOTTLES (Metal Screw Caps).  
1/2 oz., 9/; 1 oz., 10/; 2 oz., 13/;  
3 oz., 16/ gross  
POMADE BOTTLES (Metal  
Screw Caps).  
1 oz., 11/; 2 oz., 14/6; 3 oz., 13/;  
4 oz., 21/ gross.

Our Metallic Capsules are superior  
to anything in the Market.SYPHONS: Block Tin Mounts,  
best in the trade, 13/ doz. f.o.b.  
Antwerp.

BELTZOGENES: 5 pint, 12/ each.

WONDERFUL PRICES.



## HUNT'S BOTTLE CAPS

Pleated Paper, from 8d.  
per Gross.

LONDON:

25 Great Windmill St., W.

Depot of DIGNE'S ENAZYMES.

**DISPENSING BOTTLES & PHIALS**

The following are our greatly Reduced Prices:—

CLEAR BLUE TINTED.

3 and 4 oz. ....	6/8 per gross.	12 oz. ....	11/8 per gross
6 and 8 oz. ....	7/8 "	16 oz. ....	15/8 "

WHITE MOULDED PHIALS.

LONG OR SQUAT SERIES.

1/2 oz. ....	3/0 per gross.	1 1/2 oz. ....	4/8 per gross
1 oz. ....	3/8 "	2 oz. ....	4/9 "

Prompt attention to country orders. Packages 1/ each, allowed for if  
returned. Sample bottle sent free on application.**I. ISAACS & CO.**

GLASS BOTTLE MANUFACTURERS,

25 Francis St., Tottenham Court Road, London, W.C.

Established upwards of 70 years.

Bankers, London and Westminster.

**GLASS BOTTLES CHEAPER**

NETT CASH PRICES.

**MINERAL WATER.**

Plain Egg Shape Soda	...	...	...	5 oz.	8/6
" " "	...	...	...	10 oz.	10/6
" " "	...	...	...	14 oz.	12/6

**PATENTS.**

Codd's Ball Stoppers and Best Rubber Rings.

5 oz.	...	...	...	per gross	12/6
10 oz.	...	...	...	"	15/

**MEDICALS.**

Any Shape.

2 oz.	3 oz.	4 oz.	6 oz.	8 oz.
4/	4/9	5/6	6/6	7/

**VIALS.**

White, Flint, or Green.

2 dr.	1/2 oz.	1 oz.	1 1/2 oz.	2 oz.	3 & 4 oz.
2/6	2/9	3/6	4/9	5/6	6/6

**SAUCE.**

Plain, 6 oz., 6/9; Round and Flat, 12 oz., 10/9; Stoppered and Cork Ring, 6 oz., 8/6 gr.; 12 oz., 12/6.

FITCH'S PATENT SCREW CAPS with UNDERCUT THREAD are far before the thin metal caps now  
so extensively used by Chemists, and not more expensive, quite airtight, can be used for liquids, and cheap.

SAMPLES READY SHORTLY.

**W. B. FITCH & CO.**

GLASS BOTTLE MANUFACTURERS BY ELECTRO-MOTORS

(Under Royal Letters Patent to William Bowers Fitch, Memb. Pharm. Soc., Memb. Soc. Arts, &amp;c.),

New Cross Tank Glass Works, Mornington Road, LONDON, S.E.



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OFFICES FOR BRITISH AND FOREIGN  
**PATENTS AND TRADE MARKS,**  
SOMERSET CHAMBERS, 151 STRAND, LONDON  
(NEXT TO SOMERSET HOUSE).  
*Guide to New Patent Law and Registration gratis.*

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BY SANFORD'S RAT POISON.

"I have found 145 rats killed in my farm buildings by it."—C. Wilson Offord.  
"It is the most certain remedy I have ever tried. Little pellets about the size of a pea are put in the rat holes or in their runs. I destroyed over 200 rats from one dressing with it."—C. Cook, Grange Farm, Ellesmere, Salop. It is, without doubt, the best ever introduced. Price 6d., 1s., 2s., and 3s., of Chemists.  
SANFORD'S MICE POISON for Houses, Buildings, Corn Stacks, &c. Cannot be excelled. Has given entire satisfaction for the past 25 years. In packets 3d., 6d., 1s., and 2s. each, with directions for use, of SANFORD & SON, Sandy, Beds. Liberal terms to Chemists. Wholesale of Barclay & Son, Sanger & Son, Newbery & Sons, Edwards, and others, London (England).

## HAND-PICKED GUM ARABIC.

Wholesale and Export Druggists before buying elsewhere  
should apply to

**FREDK. FINK & CO.**  
10 & 11 MINCING LANE, LONDON, E.C.

## Dunn's (Healthful, Useful.)

Certificate of  
Analysis on each tin.

**Fruit-Salt**

Manufactured by  
**W. G. DUNN & CO.**  
21 Mincing Lane, E.C.

**Baking Powder**

"THE COOK'S BEST FRIEND."

Works—Croydon, Surrey.  
*Price List and Sample on application.*

TO LET.

## EMP. BELLADONNA.

ON SWANSDOWN, 16 IN. WIDE.

17s. per Doz. net cash.

**JOHN QUILLIAM & CO.,** Plaister Works, Manchester.  
Cowburn Street, [2]

## CHLORIDE OF GOLD

19/- per dozen  
15-grain Tubes  
(guaranteed);  
Postage, 2d.

The best in the market. Immense quantities sold. Exported to all parts of the World.

**LOUIS ROWLAND (Refiner),**  
59 South John St., LIVERPOOL.

THE MANCHESTER MAKERS OF

## METH. SPIRIT

Established  
1840.

AND FINISH.

J. & D. MACNAIR & CO.,  
29 Robert St., Bridgeport,  
MANCHESTER, and GLASGOW.

IMPORTERS OF

## SHELLAC, GUMS, ETC.

Send for prices and samples.

A REQUISITE FOR EVERY CHEMIST  
THOMPSON'S "EXCELSIOR"

## GELATINE PILL-COATING MACHINE,

See *Chemist and Druggist Diary* for 1887, page 246.

SMALL MACHINE TO COAT 86 PILLS EACH TIME, £3 3s.

For further particulars apply to

**JAS. ROBERTSON & CO.,** 35 George Street, EDINBURGH.  
London Agents—S. MAW, SON & THOMPSON. 1

## Critchley's Starch Gloss

Makes starched linen like new. Does not stick to spider-like materials. Once tried always wanted. Used in the Royal Laundries. Sold everywhere. In Packets, 1d., 2d., 6d., and 1s. each. Write for quotations.

Prepared only by  
**T. CRITCHLEY,**  
BLACKBURN, and  
1 & 2 Australian Avenue,  
LONDON, E.C.

## PERFUMES, No. 30.

FIFTY KINDS.

9s. for 20 oz., Carriage Paid.

Samples of any kind for 2 stamps.

When buying, compare my Perfumes with other makers', and buy the best.

**GEORGE DURRANT, HERTFORD.**

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